APP STATISTICS 2021

BusinessofApps

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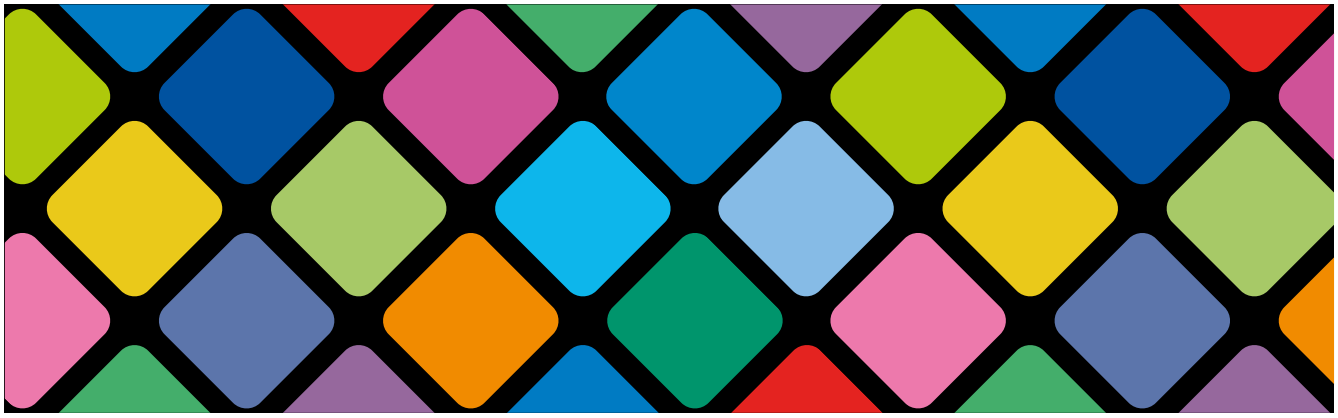
APP DOWNLOAD AND USAGE STATISTICS



The iOS App Store launched in 2008 with 500 apps. Today, 1.85 million different apps are available for users to download. Android users have even more from which to choose, with 2.56 million available through the Google Play Store.

These apps have come to play a huge role in the way we live our lives today. Through them, we can access pretty much the entire Western canon of music (and much beyond it too), meet romantic partners, and manage our diaries, documentation, and payments. Augmented reality apps are changing the way we interact with the world, and mobile gaming now accounts for lion's share of games industry revenue.

Apps have also played a part during the coronavirus pandemic that has shaped 2020, helping to facilitate social distancing and contact tracing for example. And that is not to mention the crucial role they've played in allowing us to keep in touch with distant friends, family, and colleagues.

The market for these apps is about as big as they come. It is estimated that the global number of smartphone users will rise to 3.5 billion over the course of 2020. If we looked at it in terms of devices, there are more connected mobile devices in the world (7.94 billion) than there are people.

These devices are approaching ubiquity in advanced economies, among which median penetration levels stand at 76% of adults. In South Korea, a stunning 95% of adults own a smartphone.

Emerging economies are catching up. Brazil and South Africa already log penetration levels of 60%, while India's lower figure of 24% still represents hundreds of millions of users.

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Emerging economies are catching up. Brazil and South Africa already log penetration levels of 60%, while India's lower figure of 24% still represents hundreds of millions of users.

These figures are growing every year, and along with it, the market for mobile apps. In the below report, we have gathered specific data relating to app downloads and usage. These are intended to give us a better idea of just how many apps are being downloaded every year, which of these are most popular, and how they are being used.

Read on to discover more...

1. KEY APP DOWNLOAD AND USAGE STATISTICS

1.1 KEY APP DOWNLOAD STATISTICS

Global app downloads by quarter (Sensor Tower), billions

	Google Play store	iOS App Store	Overall
Q1 2015	10.4	5.4	15.6
Q2 2015	11.3	5.2	16.5
Q3 2015	10.2	5.5	15.7
Q4 2015	10.5	5.9	16.4
Q1 2016	11.1	6.1	17.2
Q2 2016	12.6	6.3	18.9
Q3 2016	14	6.6	20.6
Q4 2016	15.2	6.5	21.7
Q1 2017	16.7	6.9	23.6
Q2 2017	16.1	6.5	22.6
Q3 2017	17.1	7.3	24.4
Q4 2017	17.4	7.1	24.5
Q1 2018	17.4	7.7	25.1
Q2 2018	18.6	7.2	25.8
Q3 2018	19.4	7.6	27
Q4 2018	20.1	7.2	27.3
Q1 2019	20.7	7.4	28.1
Q2 2019	21.3	7.4	28.7
Q3 2019	21.6	8	29.6
Q4 2019	20.9	7.8	28.7
Q1 2020	24.3	9.3	33.6
Q2 2020	28.7	9.1	37.8

Source: Sensor Tower

Global app downloads by year (Sensor Tower), billions

	Google Play store	iOS App Store	Overall
2016	57.8	26	83.8
2017	66.9	27.9	94.8
2018	75.5	29.8	105.3
2019	84.3	30.6	114.9
H1 2020	52.3	18.3	71.5

Source: Sensor Tower

Global app downloads by year (App Annie), billions

2016	140
2017	175
2018	194
2019	204*
H1 2020	64

*all figures bar H1 2020 include Chinese third-party downloads as well as iOS App Store/Google Play Store

Source: App Annie

App and game downloads by month, July 2019 – June 2020 (App Annie), billions

	Apps	Games	Total
Jun-19	6.6	4.1	10.7
Aug-19	6.4	4.1	10.5
Sep-19	5.8	3.7	9.5
Oct-19	5.5	3.4	8.9
Nov-19	5.3	3.2	8.5
Dec-19	5.4	3.6	9
Jan-20	5.8	4	9.8
Feb-20	5.4	3.7	9.1
Mar-20	6.4	4.5	10.9
Apr-20	7.1	4.9	12
May-20	6.7	4.5	11.2
Jun-20	6,4	4.3	10.7

Source: App Annie

Growth in app downloads by country, 2016 – 2019 (App Annie)

Global	45%
China	80%
India	190%
United States	5%
Brazil	40%
Indonesia	70%

Source: App Annie

Top iOS App Store categories, Q2 2020 vs Q2 2019

App type	Downloads Q2 2020, millions	Downloads Q2 2019, millions	Year-on-year increase
Games	2690	2250	19.6%
Photo & Video	703	575	22.3%
Entertainment	618	469	31.8%
Utilities	549	462	18.9%
Shopping	546	390	40.1%

Source: Sensor Tower

Top Google Play Store categories, Q2 2020 vs Q2 2019

App type	Downloads Q2 2020, billions	Downloads Q2 2019, billions	Year-on-year increase
Games	12.37	8.1	51.2%
Tools	1.82	1.45	25.3%
Entertainment	1.45	1.37	5.8%
Social	1.18	1.04	13.4%
Video	1.12	0.71	56.9%

Source: Sensor Tower

Mobile game downloads by year (Sensor Tower), billions

	Google Play	iOS App Store	Overall
2016	23.1	7.9	31
2017	27.7	8.3	36
2018	29.4	8.9	38.3
2019	32.9	9.2	42.1
H1 2020	22.8	5.7	28.5

Source: Sensor Tower

App downloads forecast growth

	iOS App Store	Google Play	Overall
2019	31	85	115
2020	39	102	150
2021	38	109	148
2022	40	119	159
2023	42	129	171
2024	45	139	184

Source: Sensor Tower

- Excluding Chinese third-party app downloads, India was the leading market for app downloads in Q2 2020, with nearly 7 billion, followed by the US with around 3.75 billion, and Brazil with 3 billion (Sensor Tower)
- Sensor Tower stats show WhatsApp was the most-downloaded app of 2019 (over 850 million downloads), followed by TikTok (~730 million), and Facebook Messenger (~810 million) (Sensor Tower)
- App Annie stats show Facebook Messenger was the most downloaded app of 2019, followed by Facebook and WhatsApp; no figures are provided (App Annie)
- Sensor Tower stats show both Zoom and TikTok were downloaded over 300 million times in Q2 2020, a feat only matched by Pokémon Go in Q3 2016 and TikTok itself in Q1 2020 (Sensor Tower)
- TikTok the most downloaded app in Q2 2020 according to App Annie, while Zoom climbed 10 places to second, and Google Meet climbed by 117 positions to seventh (App Annie)
- Sensor Tower stats show 40 million US downloads for Zoom in Q2 2020, 25 million for TikTok, and 15 million for Facebook Messenger (Sensor Tower)
- In Europe, Sensor Tower stats showed just under 60 million Zoom downloads to 50 million of TikTok and around 35 million of WhatsApp (Sensor Tower)
- Facebook's four top apps, led by Facebook itself, were the most-downloaded apps of the 2010s (App Annie)
- Facebook apps were downloaded close to 3 billion times between them in 2019, making it the top app publisher by downloads, according to Sensor Tower (Sensor Tower)
- App Annie stats indicate Google was the top app publisher of 2019 (App Annie)
- In Q2 2020, Sensor Tower also identified Google as the top app publisher worldwide, with over 1 billion downloads in this three months alone (Sensor Tower)
- Over 1 billion mobile games downloaded per week in Q2 2020 (App Annie)
- Games accounted for 40% of total app downloads in H1 2020, up from 37% in 2019 (Sensor Tower)
- Casual games account for 82% of mobile games downloads (App Annie)
- PUBG MOBILE was the most downloaded mobile game of 2019, with around 285 million downloads, followed by Garena Free Fire (around 275 million) and Subway Surfers (around 230 million) (Sensor Tower)
- Subway Surfers was the most-downloaded game of the 2010s, with 15% of lifetime downloads coming from India (App Annie)
- 4 billion shopping apps downloaded in 2019 (App Annie)
- 20.3% of total ecommerce app and 18.7% of shopping app downloads that occurred between Q1 2019 and Q2 2020 occurred in the last quarter in this range
- 65% global upswing in medical app downloads in peak lockdown month (calculated by country) vs January 2020 (App Annie)
- 65% global upswing in education app downloads in peak lockdown month (calculated by country) vs January 2020 (App Annie)
- 24 billion downloads of finance apps in Q2 2020 (Sensor Tower)

1.2 KEY APP USAGE STATISTICS

Increases in app usage by country

	2017 to 2019, daily mobile hours	2019 to Q2 2020, daily mobile hours	Q4 2019 to Q2 2020, monthly app hours
China	60%	15%	-
India	25%	37%	30%
France	25%	17%	20%
Canada	25%	39%	-
Indonesia	20%	27%	25%
Brazil	15%	28%	20%
Japan	15%	12%	15%
United Kingdom	15%	14%	15%
South Korea	15%	5%	-
Germany	15%	10%	-
United States	10%	10%	15%
Russia	10%	40%	15%
Italy	-	27%	30%
Spain	-	25%	30%

Source: App Annie

Daily mobile time by country, Q2 2020, hours

Indonesia	6.0
India	4.8
Brazil	4.8
China	4.4
South Korea	3.9
Japan	3.6
Russia	3.5
Canada	3.5
Spain	3.2
Italy	3.1
US	3.0
UK	2.8
France	2.7
Germany	2.4

Source: App Annie

Monthly app usage time by age, hours

18-24	112.6
25-34	102.4
35-44	93.6
45-54	75.6
55-64	69.3
65+	51.4

Source: Simform

Average weekly time spent with app categories, minutes

Social	131
Gaming	116
Communication	102
Music	80
Entertainment	67
Retail & ecommerce	65
Finance	57
Mobile browser	46
Others	42
Productivity	35
Health & wellness	27
Maps	25
Travel	19

Source: Simform

Percentage of overall app usage time for popular activities

	2016	2017	2018	2019
Social and comms	56%	56%	53%	50%
Video and entertainment	13%	16%	20%	21%
Games	11%	9%	9%	9%
Other	20%	19%	19%	19%

Source: AppAnnie

Percentage of total internet users who engage in app activities

Watch online videos	90%
Watch vlogs	52%
Stream music	72%
Stream radio	48%
Listen to podcasts	42%

Source: GlobalWebIndex

Percentage of users reporting increased usage of app types/activities in July 2020

Children's education	56%
Streaming film/series	54%
Streaming short videos	51%
Using social media	43%
Using messaging services	42%
Streaming music	37%
Using apps	36%
Using online learning platforms	31%
Creating/uploading videos	16%
Listening to podcasts	15%

Source: GlobalWebIndex

Percentage of users expecting continued increased usage of app types/activities in July 2020

Streaming short videos	24%
Streaming film/series	23%
Using social media	18%
Using messaging services	18%
Streaming music	17%
Using online learning platforms	15%
Using apps	13%
Children's education	8%
Creating/uploading videos	7%
Listening to podcasts	6%

Source: GlobalWebIndex

Global data usage by app category, Q1 2020

	Total data usage, exabytes	Percentage
Video apps	30.5	66%
Social networking	4.6	10%
Software updates	1.8	4%
Web browsing	1.5	3%
Audio apps	0.8	2%
File sharing	0.34	1%
Other	6.6	14%
Total	**46.1**	**100%**

Source: Hootsuite/We Are Social

Percentage of users who use apps in different contexts

At home	91%
In the bathroom	83%
With family/friends	79%
Watching TV	78%
At dinner	73%
At work	72%
Spare moments	72%
In queues	71%
Out shopping	63%
Commuting	62%

Source: Simform

Average increase in number of mobile games played, peak month vs 2019

India	35%
Russia	30%
Indonesia	26%
Brazil	23%
United States	13%
United Kingdom	11%
Japan	7%
China	7%
Canada	6%
Germany	6%
South Korea	5%
France	3%

Source: App Annie

Social media penetration by region

Northern America	69%
Central America	66%
Caribbean	48%
Southern America	68%
Western Europe	53%
Northern Europe	66%
Southern Europe	60%
Eastern Europe	51%
Northern Africa	40%
Western Africa	14%
Middle Africa	7%
Eastern Africa	9%
Southern Africa	37%
Western Asia	56%
Central Asia	23%
Southern Asia	27%
Eastern Asia	63%
Southeastern Asia	63%
Oceania	56%

Source: Hootsuite/We Are Social

Average daily social media usage time by age and gender, hours

Age	Gender	Time
16-24	all	02:53
	male	02:37
	female	03:12
25-34	all	02:34
	male	02:27
	female	02:42
34-44	all	02:14
	male	02:12
	female	02:16
45-54	overall	01:50
	male	01:44
	female	01:57
55-64	overall	01:20
	male	01:13
	female	01:27

Source: Hootsuite/We Are Social

Main reasons for using social media, by age

	Gen Z	Millennials	Gen X	Baby Boomers
To fill spare time	41%	34%	29%	25%
Ro find entertaining content	40%	35%	29%	24%
To keep up-to-date with news	34%	36%	37%	36%
To stay in touch	33%	33%	33%	35%
To share photos/videos	31%	29%	26%	24%

Source: GlobalWebIndex

- Global average of 200 billion hours spent using apps on Android devices each month in Q2 2020 (App Annie)
- Total of 1.6 trillion hours spent using apps on Android devices over H1 2020 (App Annie)
- As lockdown was imposed in late March, collective global app usage time on Android devices came to nearly 70 billion hours per week, 25% above the weekly average for H2 2019 (App Annie)
- Between 2017 and 2019, average daily app usage time increased by 35% globally on Android devices to around 3 hours 40 minutes (App Annie)
- Hootsuite/We Are Social pegged average global app usage time at 3 hours 29 minutes in July 2020 (Hootsuite/We Are Social)
- The average global Android user spent 27% of waking hours on mobile in April 2020, up from 20% in 2019 (App Annie)
- 70% of global users from select markets reported increased smartphone usage in early July 2020 (GlobalWebIndex)
- Gen Z app users spend 3.8 hours on average each month using each of the top 25 non-gaming apps, split between an average of 150 monthly sessions per app (App Annie)
- Users aged 21-30 have an average of 67 apps on their phone, of which they actually use 25 (Simform)
- As of August 2020, Android devices account for 74% of global devices, to iOS's 25% (StatsCounter)
- 72% of internet users aged 16-64 in select markets use a smartphone to play games (GlobalWebIndex)
- There will be an estimated 2.5 billion mobile gamers by the end of 2020 (NewZoo)
- Mobile games DAUs up by nearly 30% year-on-year in April (Financial Times)
- Core games account for 55% of mobile game usage time, and casual for 44% (App Annie)
- 65% of people aged 13+ around the globe have a social media account (Hootsuite/We Are Social)
- Average daily time spend on social media stands at 2 hours 22 minutes (Hootsuite/We Are Social)
- 99% of internet users aged 16-64 in select markets use social media each month, with 88% actively participating (Hootsuite/We Are Social)
- Average user has 8.8 social media accounts (Hootsuite/We Are Social)
- 67% of users used a mobile shopping app in Q1 2020, with 52% purchasing a product via mobile (GlobalWebIndex)
- Chinese users spent 4 billion hours with education apps in Q2 2020, compared to 400 million hours in second-placed India (App Annie)
- Finance apps used 1 trillion times on Android devices over 2019, with around 450 billion of these sessions coming from China (App Annie)
- Fintech digital wallet apps used six times per week on average globally in 2019, compared to five sessions for digital wallet apps from traditional banks (App Annie)

2. APP DOWNLOAD STATISTICS

2.1 APP DOWNLOAD STATISTICS OVERVIEW

App downloads have rapidly increased over recent years, according to stats published by Sensor Tower. The total number of apps downloaded globally each quarter has doubled in the five years since 2015, reflecting both increased smartphone penetration and the increasingly prominent role of apps in our lives.

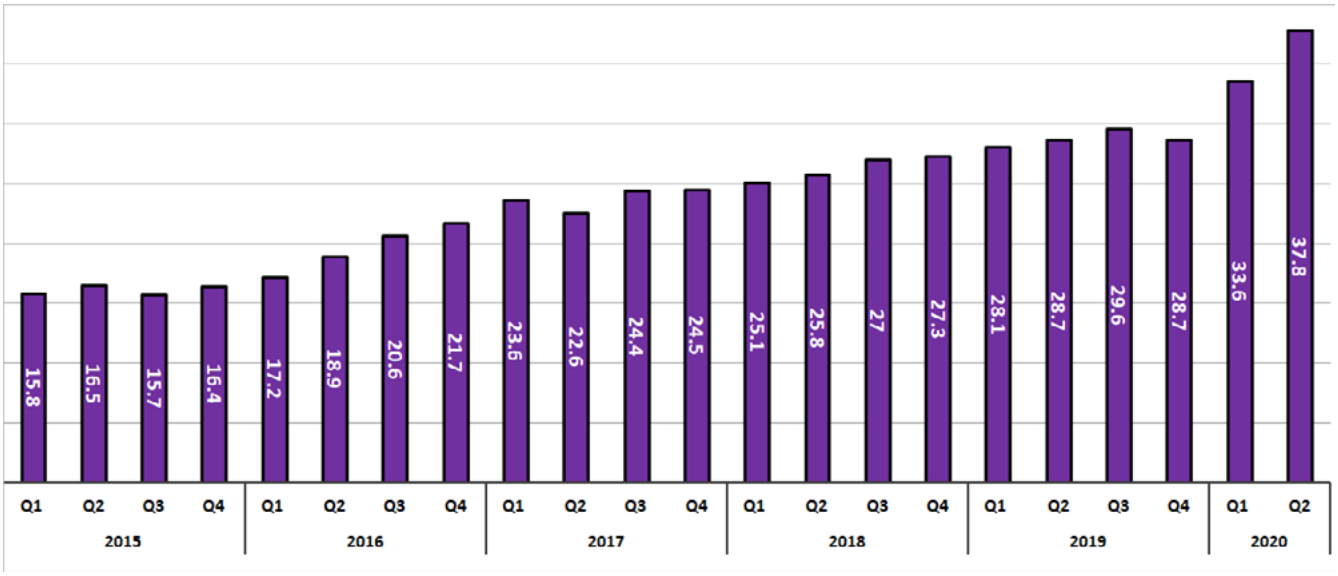
We saw a sharp jump in app downloads in the first two quarters of 2020, with Q2's total of nearly 38 billion app downloads representing a 9 billion increase on Q4 2019; an increase of nearly a third (32% to be precise.).

Clearly, the coronavirus pandemic that has so defined the year has led users to turn increasingly to their mobile devices for distraction, to stay in touch, and for work.

These changed circumstances may well have served to reverse, or at least mask, a slowdown in app download growth. In 2019, we saw something of plateau after three years of strong growth. Indeed, Q4 2019 even saw a small decline in app downloads.

Whether this was an anomaly or representative of a deeper trend is unclear at this point. We will probably have to wait for some of the dust from 2020 to settle before drawing any sorts of macro-level conclusions.

Total app downloads by quarter, Q1 2015 – Q2 2020, billions (Sensor Tower)



Data source: Sensor Tower

If we break it down by app store, we can see clearly that Google Play dominates the global app download landscape. As of Q2 2020, over three times more apps were downloaded through the Google Play Store than through the iOS App Store – 28.7 billion to 9.1 billion. This is in line with the total proportion of users of each OS, with Android estimated to claim a 74% market share in August 2020.

This represents a shift. If we look back to 2015, we can see the ratio is more like 2:1. We can most likely ascribe the increasing prominence of Google Play to widening global access to smartphones. Android offers a significantly lower point of access, being available on a wide range of low-cost as well as high-spec devices.

The more expensive iPhone, on the other hand, enjoys a higher market share in certain higher-GDP economies – most prominently in the US (59% market share) and Japan (63%). For this reason, we might note that the iOS App Store generates a significantly larger share of app revenue than the Google Play Store, despite accounting for far fewer devices globally.

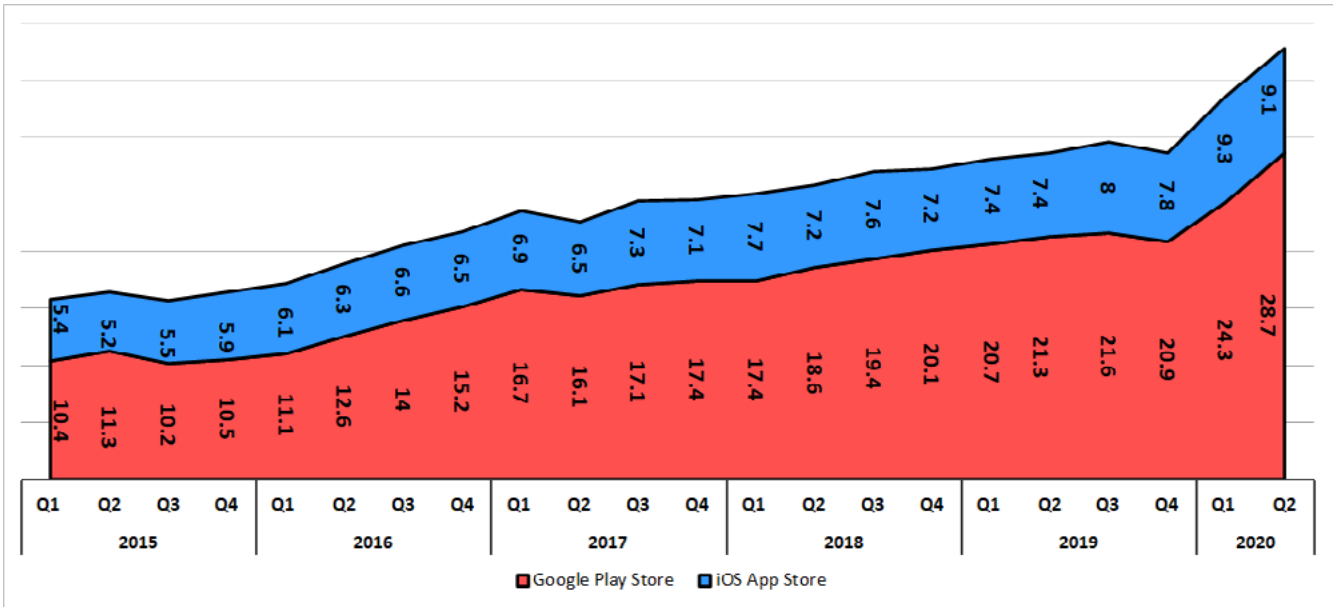
While Android downloads have been the engine room of growth in app downloads, the most dramatic leap in proportional terms we've seen in recent years was the 19% leap in iOS downloads registered in Q1 2020. We

might also note, however, that Q2 2020 saw a small decline, while Google Play app downloads grew by 18%, after 16% growth in Q1. There is, it seems, a ceiling on iOS app download growth that does not exist for Google devices.

These Android download figures are limited to those made through the Google Play Store; third-party downloads are excluded. This means that any direct downloads of Fortnite from Epic won't be counted, for instance. Most significantly, however, it means that Android downloads in China are not counted, due to Google Play Store being blocked in the world's largest app market.

With some 900 million smartphone users, 80% of whom use Android phones in China, this results in something of a skewing of true global results.

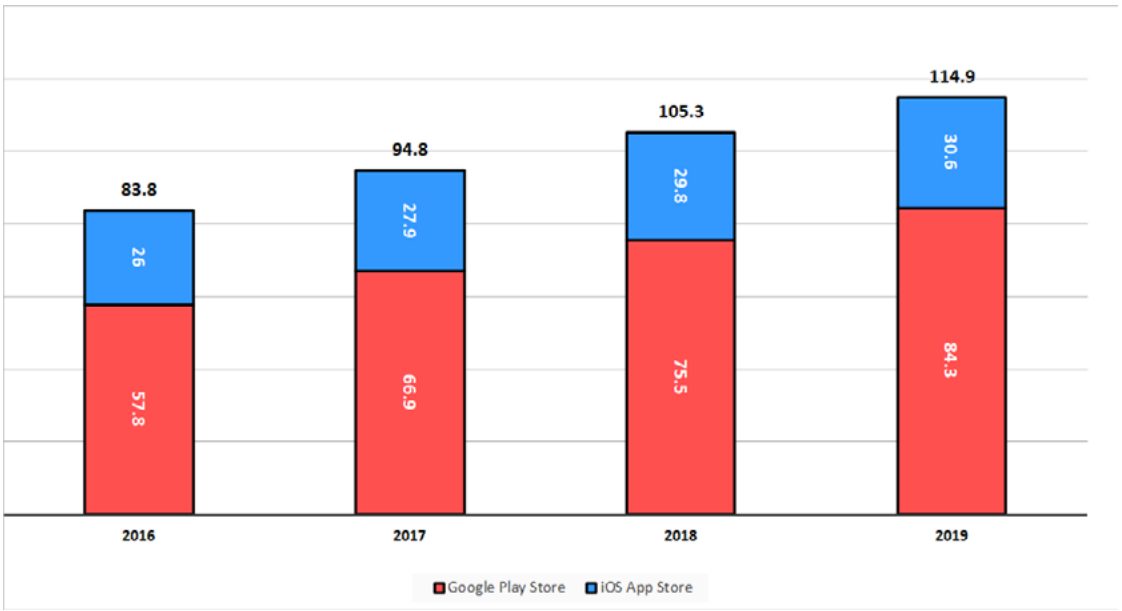
App downloads by app store by quarter, Q1 2015 – Q2 2020, billions (Sensor Tower)



Data source: Sensor Tower

Looking at annual app download figures allows us to clearly map the overall slowdown in app download growth we've seen in recent years. We see a neat trend, with 13% growth in 2017, falling to 11% in 2018, and 9% in 2019.

App downloads by app store by quarter, Q1 2015 – Q2 2020, billions (Sensor Tower)



Data source: Sensor Tower

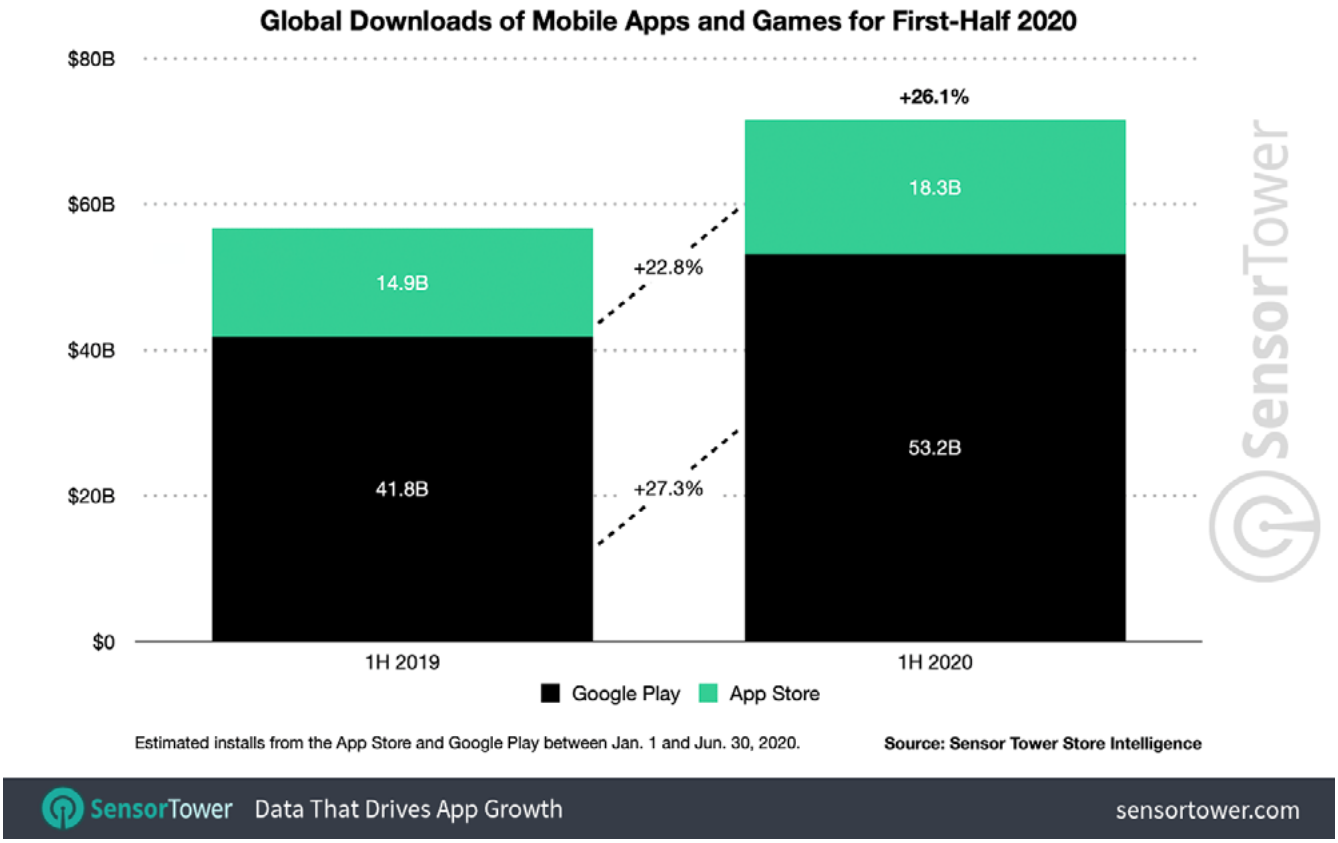
Of course, the events of 2020 have put paid to any sort of neat patterns or trends. With 71.5 billion downloads registered in H1 2020, we may well see levels of growth not seen for many years by the end of December. This figure is a 26% increase on H1 2019.

Google Play downloads grew at a faster rate than those made through the iOS App Store, with 27% growth giving us a total of over 50 billion. iOS App Store downloads grew to 18 billion on the back of a 23% increase over H1 2019.

If we cast our gaze back a year, we were looking at a 2% year-on-year (H1 2019 compared to H1 2018) decline in iOS downloads, and a 13% year-on-year increase in Google Play downloads. This perhaps gives us an indication of how different 2020 has been in comparison (if anyone needed such a reminder).

Whether this will subsequently be forgotten as 'normal' service resumes, or represents a new age of prominence for the app as working and living patterns change indelibly remains to be seen.

App downloads by app store by quarter, Q1 2015 – Q2 2020, billions (Sensor Tower)

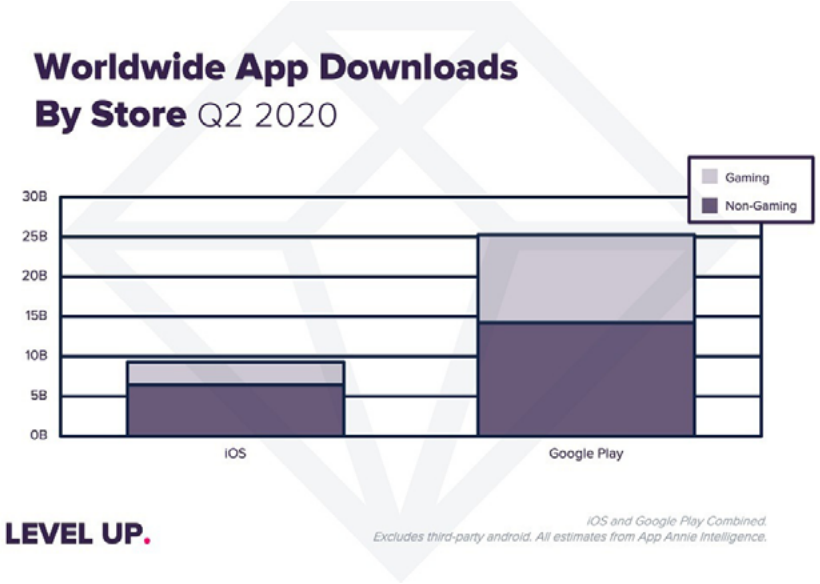


Data source: Sensor Tower

Sensor Tower is not the only organisation to produce app download stats. App Annie also produces quarterly and annual download figures. Looking once again just at Google Play and iOS App Store stats, App Annie also identifies a record quarter in Q2 2020, in which nearly 35 billion apps were downloaded.

Five in every seven of these downloads came through the Google Play Store, with a little over 25 billion downloads. iOS App Store downloads came to a little under 10 billion, on the other hand. By this estimation, the greater growth was logged in the iOS App Store, which saw 20% year-on-year growth, compared to the 10% seen with regard to Google Play downloads. Mobile games accounted for a greater share of Google Play downloads; 45% in all, compared to 30% in the iOS App Store.

App store downloads Q2 2020 (App Annie)

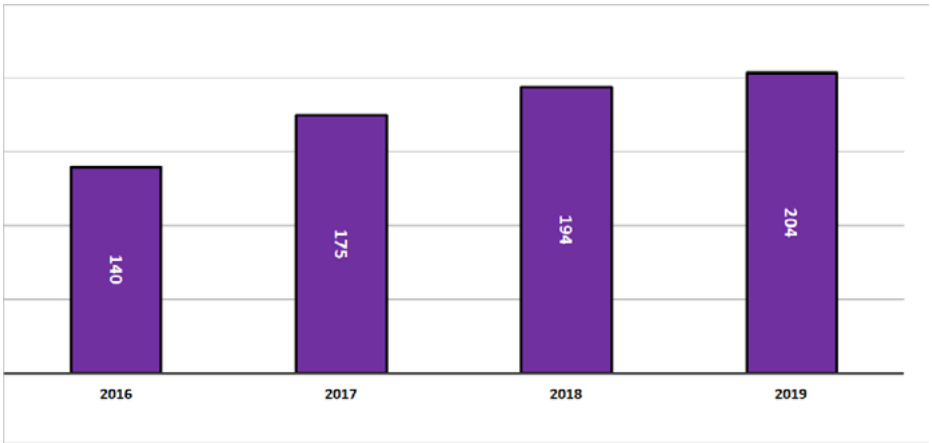


Data source: App Annie

App Annie's stats tell a similar long-term story in terms of an overall slowdown, albeit at an even more pronounced rate. We saw 25% growth in 2017, falling to 11% in 2018, and finally a mere 5% growth was registered in 2019. This would seem to confirm the theory of a wider slowdown in app downloads statistics...at least before 2020 happened. These app download stats give us a much higher total figure of 204 billion app downloads over the course of 2019. The difference in methodology that accounts for this divergence in the two sets of annual app download stats is the inclusion of Chinese third-party downloads.

We'll cover country-level stats below, but we might note that China accounts for around 45% of global app downloads. Take these downloads out of the equation and the App Annie and Sensor Tower stats line up closely – though this would be to disregard the Chinese iOS downloads included in the Sensor Tower stats.

App store downloads Q2 2020 (App Annie)



Data source: App Annie

That gives us a picture of how things were. But as the Q2 stats above show, we're on a different trajectory altogether now.

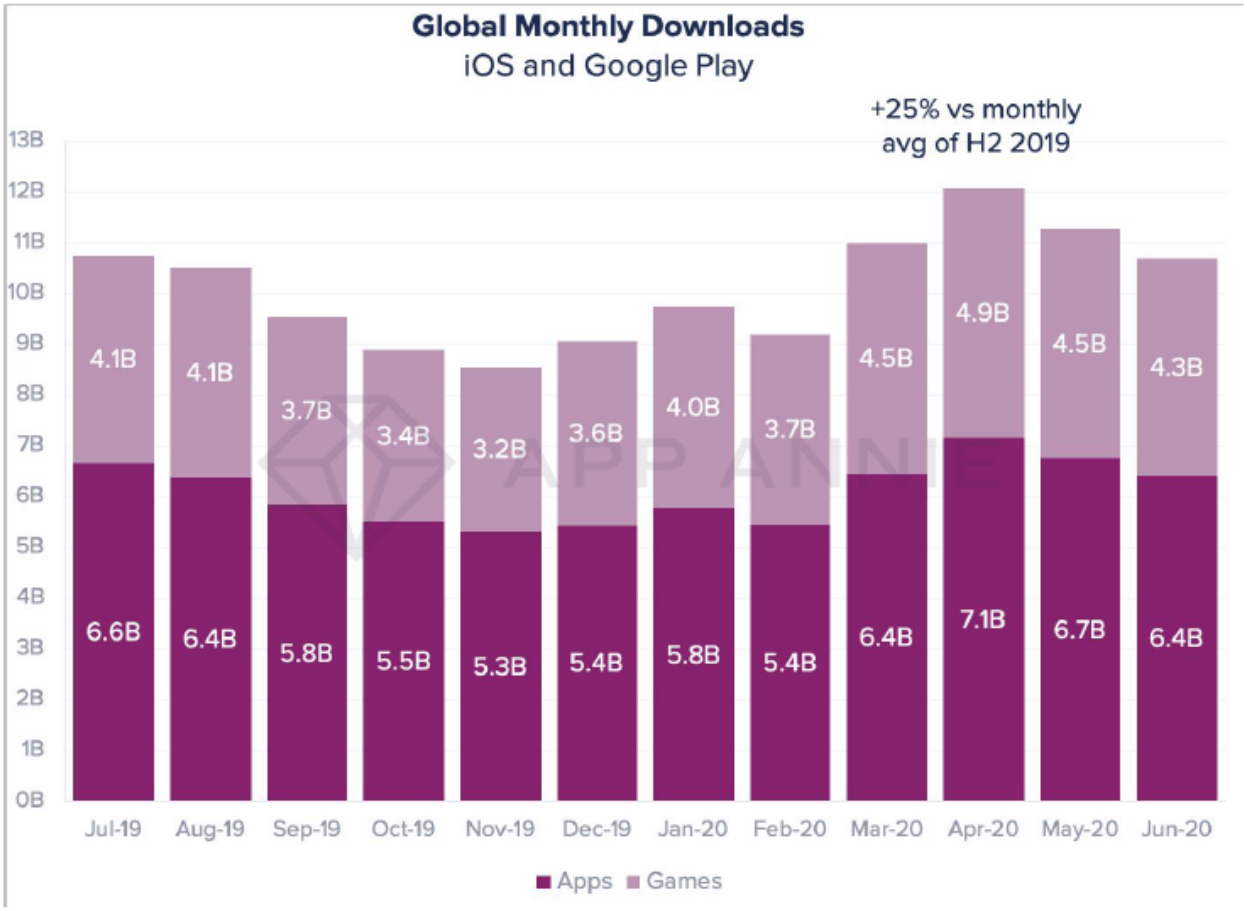
A report looking at H1 2020 highlights this. Looking at Google Play and iOS App Store data only, 64 billion app downloads were made over these six months. This represents a 10% overall increase compared to H2 2019. While this reverses the slowdown seen in 2019, we might note that these figures are not as dramatic as those reported by Sensor Tower.

The highest monthly download levels in H1 2020 came in April, the first full month of stringent lockdown conditions in much of the world. Here we saw a total of 12 billion downloads through the two major app stores, 25% greater than the monthly average in H2 2019. Of these, 4.9 billion (41%) were games, on top of 7.1 billion non-game app downloads.

The two following months saw a contractions in download volumes, with June 2020 seeing figures equal to those registered in July 2019. We might note that in June 2020, we saw a slightly higher proportion of game downloads as compared to July 2019.

With lockdown conditions being eased from July onwards, we may see this trend continue. Further lockdowns, of course, would have the opposite effect.

App store downloads Q2 2020 (App Annie)



Data source: App Annie

2.2 APP DOWNLOADS BY COUNTRY

App Annie app download stats show that China truly dominates the app download market, accounting for around 45% of global total downloads. It has grown more prominent in recent years, with Chinese app downloads growing by 80% since 2016, compared to global growth of 45%. The total figure is around 95 billion.

China's rapidly increasing app download figures can be ascribed to both increasing digitalisation of everyday life in hyper-developed Tier 1 and 2 cities, combined with increased mobile penetration in lower tier cities and rural areas.

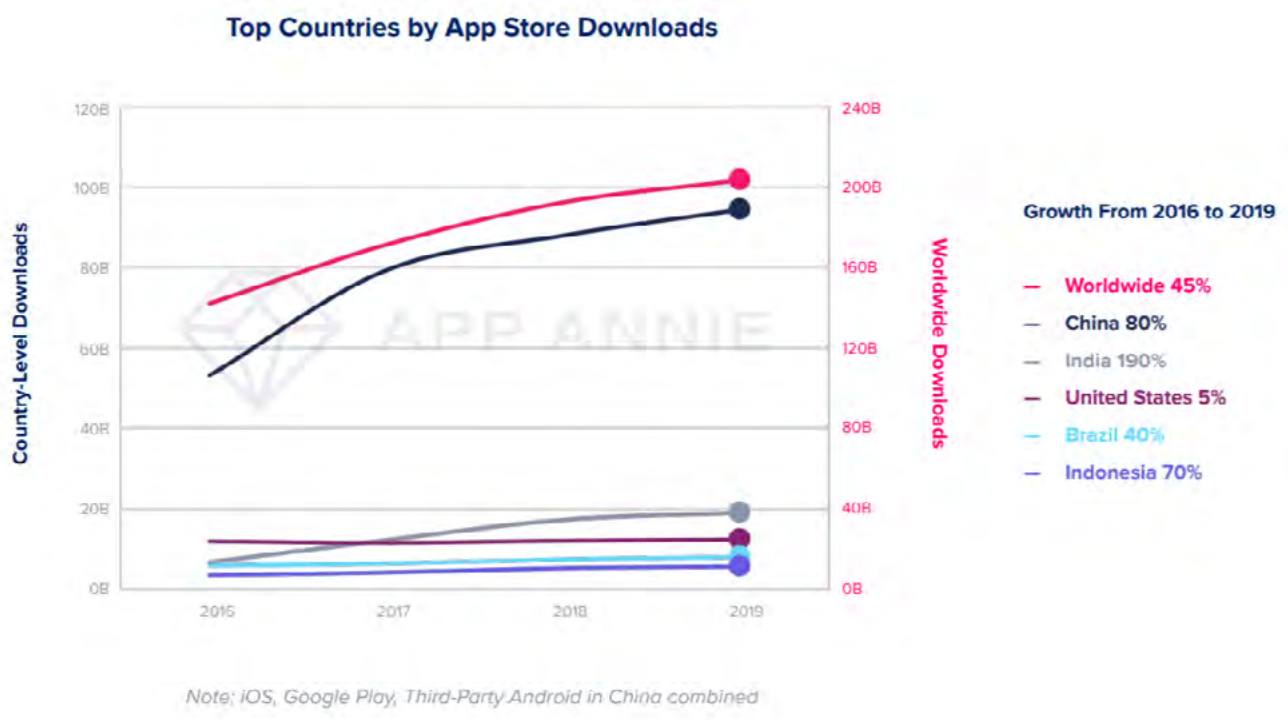
Aside from China, which is a law unto itself, we have seen two complementary trends in the aforementioned span of years. The first is a slowdown in app download growth in mature markets, and second is rapid growth in emerging ones.

Of the latter, India leads the way in terms of both growth and volume. The incredible 190% growth we've seen since 2016 may well have been from a low base for a country with well over 1 billion citizens, but since 2017 it has been second in terms of global app downloads. In 2019, nearly 20 billion app downloads were registered in India; more or less 10% of the global total.

12.3 billion US downloads leave the world's leading mature app market in third place, with three-year growth of a mere 5%.

Brazil and Indonesia round out the top-five, two countries at different stages of mobile development. Brazil's 40% is high, though a little lower than the global average, indicating a transition to mature app market. Indonesia's 70% growth in app downloads reflects an earlier, more rapid expansion phase in the world's fourth-most populous country.

Total app downloads by country, 2016 – 2019



Data source: App Annie

Narrowing our focus to Q2 2020 once more, Sensor Tower stats show a similar hierarchy of countries when it comes to app download volume. These stats don't include Chinese third-party downloads, meaning the results are incomplete, but we get a closer look at what's happening elsewhere without the skewing of scale China's inclusion requires.

India leads the way by some distance, with some 7 billion downloads to the US's (approximately) 3.75 billion. Brazil (3 billion), Indonesia (close to 2 billion) and Russia (1.5 billion) compete the top-five.

The US and Japan (ninth, with less than 1 billion app downloads in Q2 2020) represent the only highly-developed app markets here. Elsewhere we see the likes of Mexico, Vietnam, and Egypt featuring, reflecting the depth and breadth of mobile penetration in many emerging markets around the world.

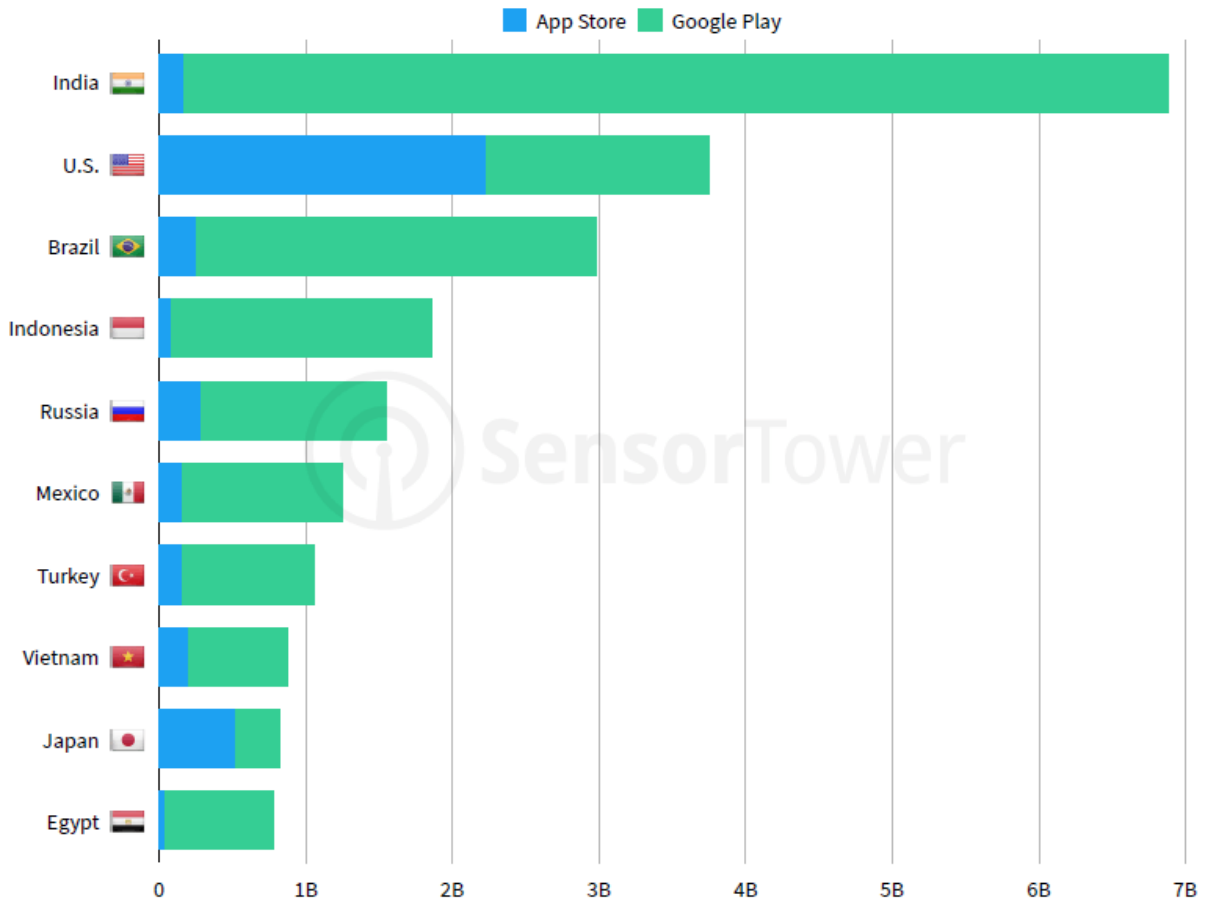
All 10 of these countries are among the top-20 most-populous countries in the world. That we see a simple high population = high app download volume dynamic confirms that we are coming closer and closer to universal reach for mobile aps.

If we allow Russia for Europe, every continent except for the sparsely populated Australia is represented in this list.

These figures are also broken down by store. The prevalence of emerging markets means that Google Play is very much preeminent here. The exceptions are the world's biggest and third-biggest economies: the US and Japan.

That's not to say that iOS doesn't feature outside of these markets. In certain markets – Brazil, Russia, and Vietnam, for example – we certainly see enough iOS downloads that we would notice the difference if they weren't there.

Total app downloads by country, Q2 2020



Data source: Sensor Tower

2.3 MOST-DOWNLOADED APPS

According to Sensor Tower data, the most-downloaded app over the full-year of 2019 was simple messaging app WhatsApp, which was downloaded over 850 million times. The Facebook-owned app dominates the messaging app landscape outside of the US, where Facebook Messenger is dominant. That the latter ranks third in terms of downloads reflects Facebook's firm grasp over the instant messaging landscape, as well as the primacy of these simple, but essential apps.

It seems the only thing that could possibly erode the download volume of these apps would be total saturation. But with new app users joining the market every year – both young users and users from emerging markets – it is hard to imagine any list of the most-downloaded apps without these mainstays. Facebook's dominance doesn't end with instant messenger apps. Fourth and fifth position go to Facebook proper and Instagram. Despite criticism of Facebook's approach to privacy, fake news, users' mental health, and more, and a much-discussed drop off in popularity among young users, these apps are still being downloaded hundreds of millions of times every year. The only app that has managed to upset Facebook's hegemony in recent years is TikTok, which climbed into second place, after breaking into the top-five in 2018. The short video app from ByteDance has certainly logged incredible numbers since launching in China (as Douyin) in 2016, then merging with musical.ly and launching in the West in 2018. To these incredible numbers, we can add over 700 million global downloads in 2019.

Whether these incredible download stats can be maintained depends how the app manages to weather the various storms of 2020. The year has seen TikTok banned in India, its largest international market, alongside other Chinese apps following a border dispute between the world's two most-populous nations (though officially, it is down to concerns over privacy, with China not directly named in the ban). It was also threatened with a US ban by Donald Trump unless it was sold – despite ongoing attempts to ringfence TikTok from ByteDance's other operations. Eventually Oracle emerged as the buyer, after a failed bid from Microsoft.

Other apps based in China or with high levels of Chinese investment may also see drop offs in downloads following the India ban, instigated in late June 2020. These include sixth-place short video app Likee, seventh-placed SHAREit, and 11th placed UC Browser, as well as social app Helo in 18th, specifically designed by ByteDance for the Indian market. The Indian market is influential, so if the ban continues, the effects are likely to be felt. We see a host of other familiar Western names in the top-20, the likes of YouTube, Netflix, Uber, and Spotify. YouTube Music registered 200 million downloads over 2019, as it was combined with Google Play Music, putting it only one position behind Spotify in the download charts. It has since gone on to register 500 million app downloads. It is fair to say, it has surpassed expectations in a market thought to be cornered by Spotify and Apple Music. The absence of stats on Chinese third-party downloads means we can't compare stats for apps like WeChat, Tencent Video, and Alipay. The additional Chinese Douyin downloads could well have pushed TikTok into first place.

Most-downloaded apps overall worldwide, 2019 (Sensor Tower)

Data source: Sensor Tower

These stats do not include gaming apps, which Sensor Tower categories separately. If these were included a few would certainly feature in the top-20, with most-download game PUBG MOBILE threatening to break into the top-10.

App Annie stats tell a different story. We get the same mix in the top-five, but in a different order. Curiously, the most-downloaded app in this estimation is Facebook Messenger, followed by Facebook, and then WhatsApp comes in at third. TikTok only manages fourth place this time.

Lower down, we see the same apps featuring as did in Sensor Tower's estimation, expect also in a different order. Spotify makes the top-10 at the expense of YouTube here, though given the rest of the table we might safely assume it's not too far off.

These stats are limited to iOS and Google Play, so once again we're left without those all-important China third-party stats.

We are also given a cut of the top games here, which is topped by Garena Free Fire by Sea, followed by Tencent's PUBG MOBILE, and Kiloo's Subway Surfers – three names which would certainly be familiar to any mobile gamers out there.

The most prominent genres of games we find among the top-10 are shooters like PUBG or Call of Duty: Mobile and so-called (but self-explanatory) hyper-casual games such as Color Bump 3D or Stack Ball. Others – Subway Surfers and pet simulator My Talking Tom 2 – err towards the casual.

With mobile gaming now accounting for the greatest share of games industry revenue, we can see there is a clear appetite among mainstream consumers for these simple games, with which a few minutes here and there can be wiled away.

Most-downloaded apps overall worldwide, 2019 (App Annie)

Top Apps

1	Facebook Messenger	Facebook
2	Facebook	Facebook
3	WhatsApp Messenger	Facebook
4	TikTok	ByteDance
5	Instagram	Facebook
6	SHAREit	SHAREit
7	Likee	YY Inc
8	Snapchat	Snap
9	Netflix	Netflix
10	Spotify	Spotify

Top Games

Free Fire	Sea
PUBG MOBILE	Tencent
Subway Surfers	Kiloo
Color Bump 3D	Good Job Games
Fun Race 3D	Good Job Games
My Talking Tom 2	Outfit7
Run Race 3D	Good Job Games
Homescapes	Playrix
Call of Duty: Mobile	Activision Blizzard
Stack Ball	Azur Interactive Games

Data source: App Annie

Coming forward a couple of quarters to Sensor Tower's Q2 2020 stats, we get a picture of what people were downloading during the peak months of lockdown.

In short, it is a very much a story of two apps: Zoom and TikTok. The former app is one that will perhaps forever be synonymous with this period, when 'to Zoom' became a verb. Though designed for business, the app became the communication app of choice for friends and families during this period, as well as professional users. Whether we will see the app continued to be downloaded at this level as lockdowns are eased and concerns about data privacy are raised is a matter for the future.

Zoom became only the third app to surpass 300 million downloads in a single quarter. The first was Pokémon Go in Q3 2016; the second was TikTok which surpassed the threshold in both Q1 and Q2 2020. As mentioned above, TikTok has faced some significant challenges in summer 2020. These may be an impediment to TikTok becoming the most-downloaded app over the course of the year. As these unprecedented stats indicate, however, this would certainly not be down to any sort of lack of appetite among users.

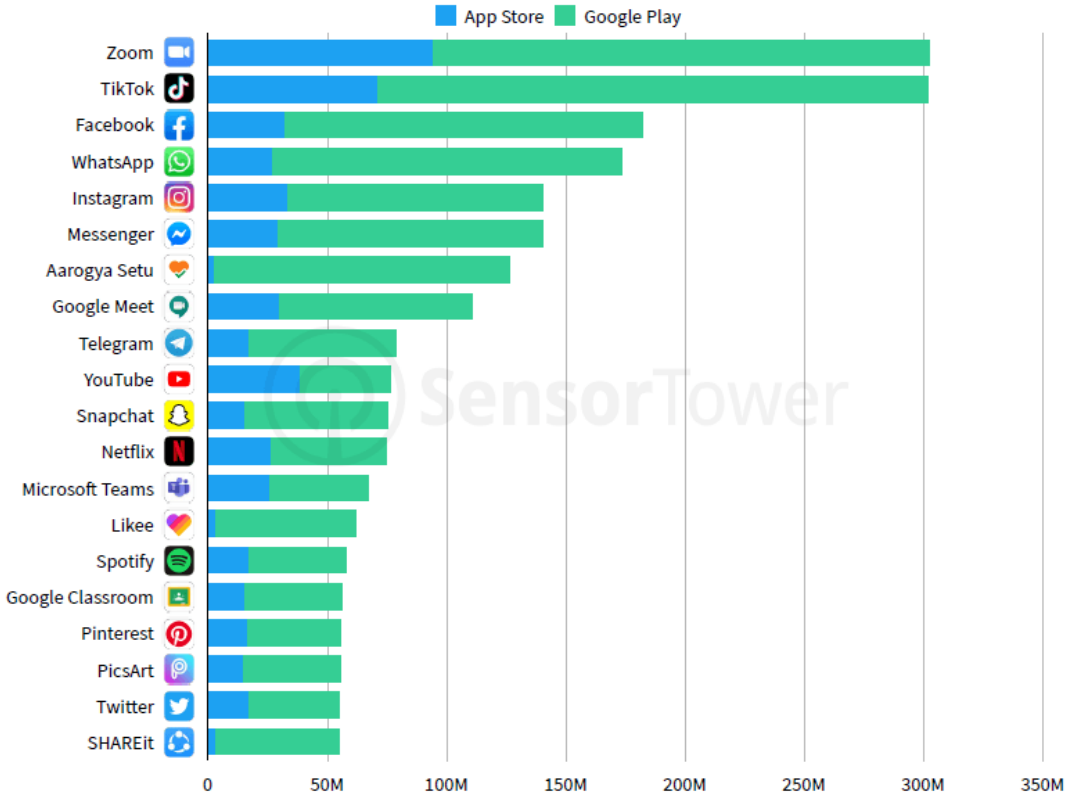
Zoom and TikTok were each well over 100 million downloads ahead of the next most-popular apps in this quarter – the usual Facebook contingent.

That said, there are other signs that this was not a usual quarter for app downloads. The presence of Google Meet, with over 100 million downloads, Telegram with over 75 million, and Microsoft Teams with over 50 million, indicates a definite skewing towards those apps that allow us to stay in touch. Google Classroom's 50 million-plus downloads point to the need to find solutions to ensure education was undisrupted. But perhaps the most telling example comes in the form of Aarogya Setu – an Indian governmental app designed to help manage information related to coronavirus, access to health services, and contact tracing.

Aarogya Setu was the seventh most-downloaded app globally in Q2 2020, registering over 125 million downloads, according to Sensor Tower. Elsewhere, we are told that the app reached the 100 million user mark with 41 days. These were unique users, not just downloads. We might note the app was made mandatory for government workers during this period.

The success of this app reflects the considerable role that apps can play in public life. Of course, it is never that simple. Privacy concerns have been raised, and critics have pointed to the fact the app's terms leave the door open to surveillance and enforcement. The source code was made public in late May, in the interests of transparency.

Most-downloaded apps overall worldwide, Q2 2020 (Sensor Tower)



Data source: Sensor Tower

App Annie's ranking, on the other hand, puts TikTok in first place, maintaining its top billing from Q1 2020. We don't get any absolute figures here so have to make do with the ranking alone.

Zoom still features prominently here, ranking in second place – a jump of 10 positions compared to Q1 2020. We might note that the first quarter had already seen Zoom enjoy a boost in terms of download figures.

Google Meet, on the other hand, saw a later surge in popularity as lockdowns were put into place more firmly (and users looked for alternatives as privacy issues arose connected to Zoom). Q2 2020 saw Google Meet becoming the seventh most-downloaded app worldwide, after jumping 117 places in ranking download charts.

Aside from the rise of TikTok, and context specific surges in downloads for videoconferencing apps, it seems mostly like business as usual. It would be remiss for us not to once more note, however, the rise of Telegram, which here climbs into eighth from 11th. Clearly, despite the enduring monopoly of Facebook's empire of messaging apps, there is some appetite for an alternative. Particularly one which promises a greater level of privacy than the Facebook family.

These stats look at Google Play and iOS App Store downloads, so do not include Chinese third-party downloads.

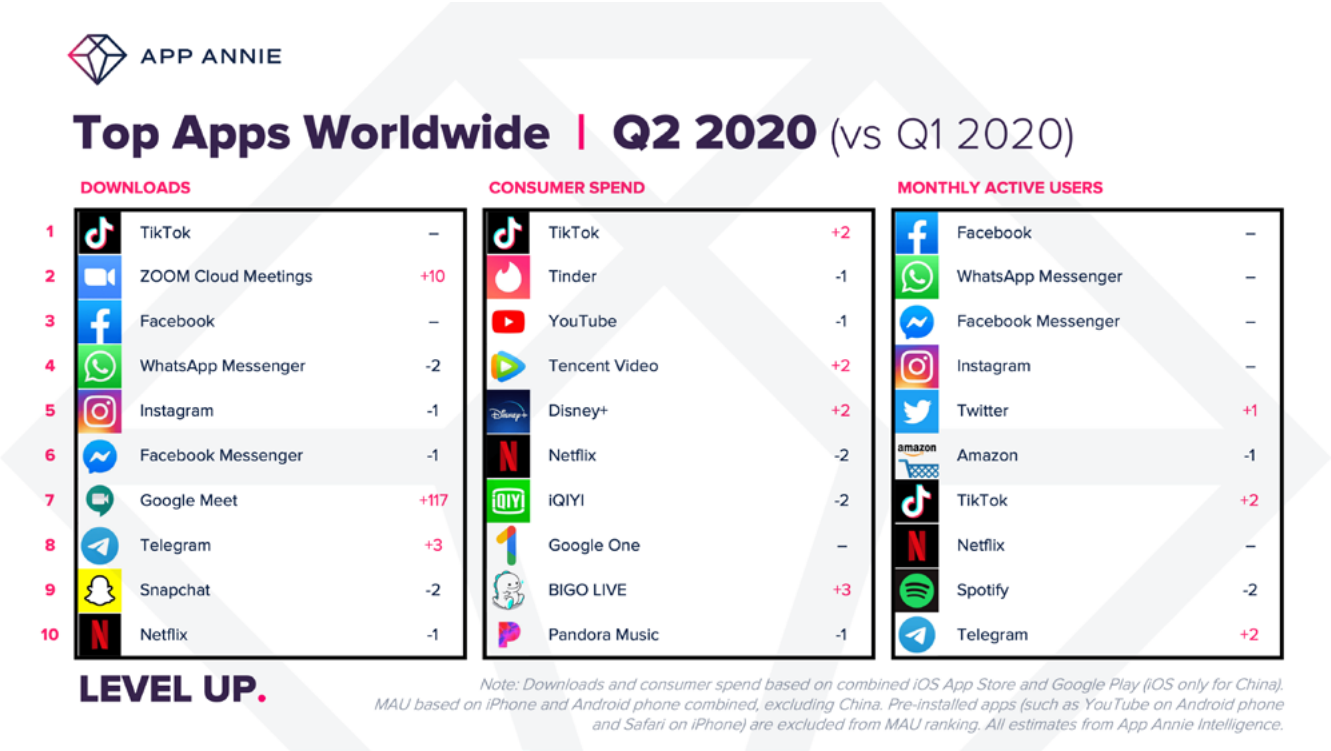
Here we can also see here that TikTok topped the charts for consumer spend, knocking Tinder off its long-held perch at the top of this metric. We might note here that, despite not having figures for third-party consumer spend, two Chinese apps (discounting TikTok) feature: Tencent Video and streaming platform iQIYI. This is a mere hint of the economic power held by the Chinese market.

We might also note the presence of the less-celebrated US-only music platform Pandora Music here, as well as Singapore-based livestreaming platform Bigo Live. Disney+, in its second full quarter of existence, ranks fifth.

In terms of active users, the Facebook family of apps claims its habitual top four slots, with Twitter – so often written off – continuing to rank fifth, ahead of even Amazon. Telegram also makes it into the top-10 here, reflecting its prominence.

Users of preinstalled apps, such as YouTube on Android or Safari on iOS, are not counted against these MAU totals.

Most downloaded apps overall worldwide, Q2 2020 (App Annie)



Data source: App Annie

SensorTower offers a zoomed-in focus on the US and Europe.

In Q2 2020, as it did globally, Zoom dominated the app download landscape in the US. It logged over 40 million downloads here, with second-place TikTok 'lagging' some way behind with 25 million. No other app comes anywhere near these two, with third-place Facebook Messenger logging a little short of 15 million.

Of course, the events of this quarter have skewed the results in Zoom's favour. It is hard to imagine too many more quarters in which this app features so prominently, serving a single clear purpose as it does.

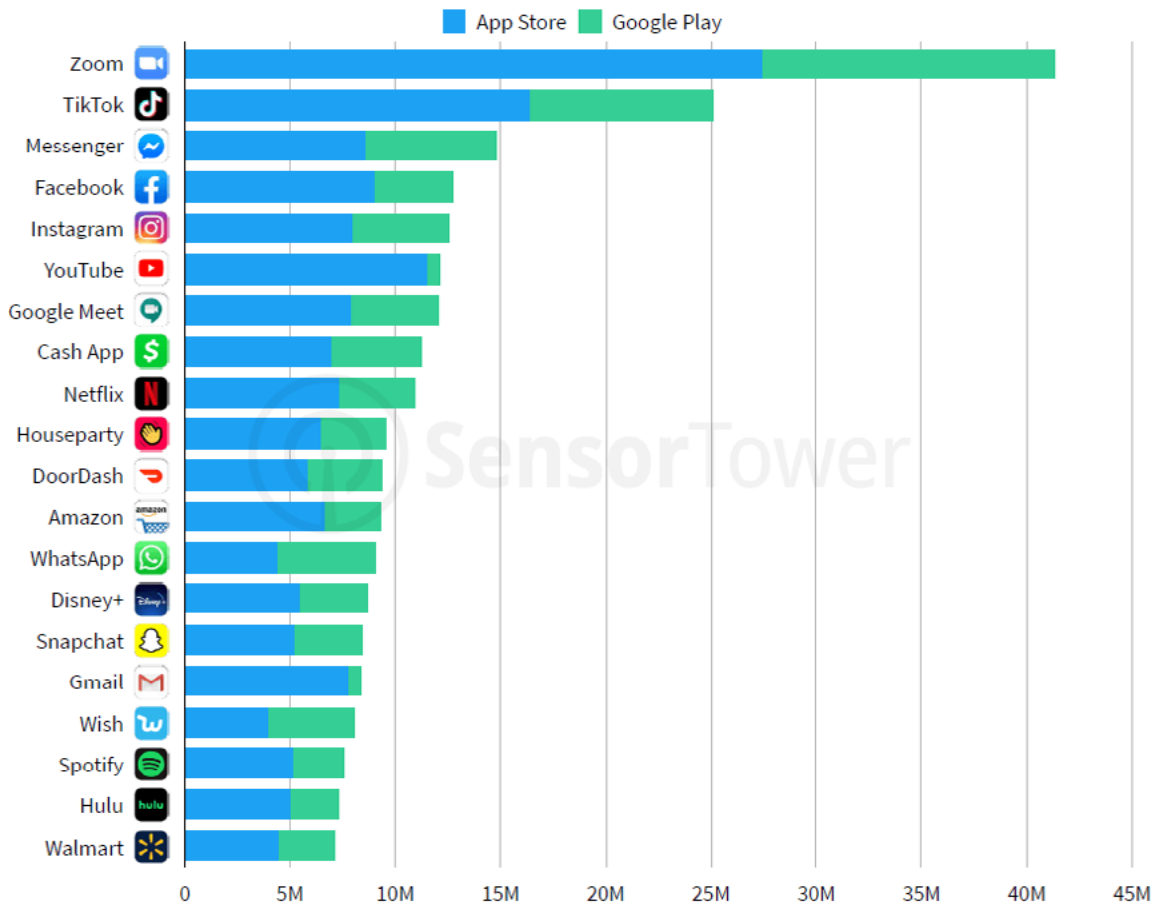
The real story is TikTok, which has shaken up the app download landscape in the US in a way that few apps have managed in recent years. It has become one of those apps that we can class as a real cultural phenomenon, which has changed the way we express ourselves and communicate (well, at least those of us under the age of 30 – or advertisers trying to reach them).

To put this 25 million in context, top app Disney+ logged just over 30 million downloads in its launch quarter in Q4 2019. Step back another quarter still to Q3 2019, and the leading app was Facebook Messenger, with a little over 13 million downloads.

Houseparty's nearly 10 million downloads can also be ascribed to the lockdown, as can an above average download figure for DoorDash, and Google Meet's 12 million downloads.

We might note that if we only looked at iOS downloads, YouTube would be the third most-downloaded app in the US in Q2 2020. If it did not come preloaded on Android devices, it may well have ranked higher, as users sought diversion from the many difficulties of 2020.

Top apps in the US, Q2 2020 (Sensor Tower)



Data source: Sensor Tower

In Europe, Zoom's lead over TikTok is not so pronounced, with a little over 60 million downloads to 50 million. If we just looked at Google Play downloads, Zoom's lead over TikTok in this quarter is perhaps only around a million downloads. iOS users, however, are more emphatic Zoom users.

While in the US, we see Google Meet featuring prominently, in Europe, Microsoft Teams seems to be the preferred Zoom alternative, with around 20 million downloads in this quarter. We might also note the popularity of Telegram in the European market, though this is not particular to this quarter.

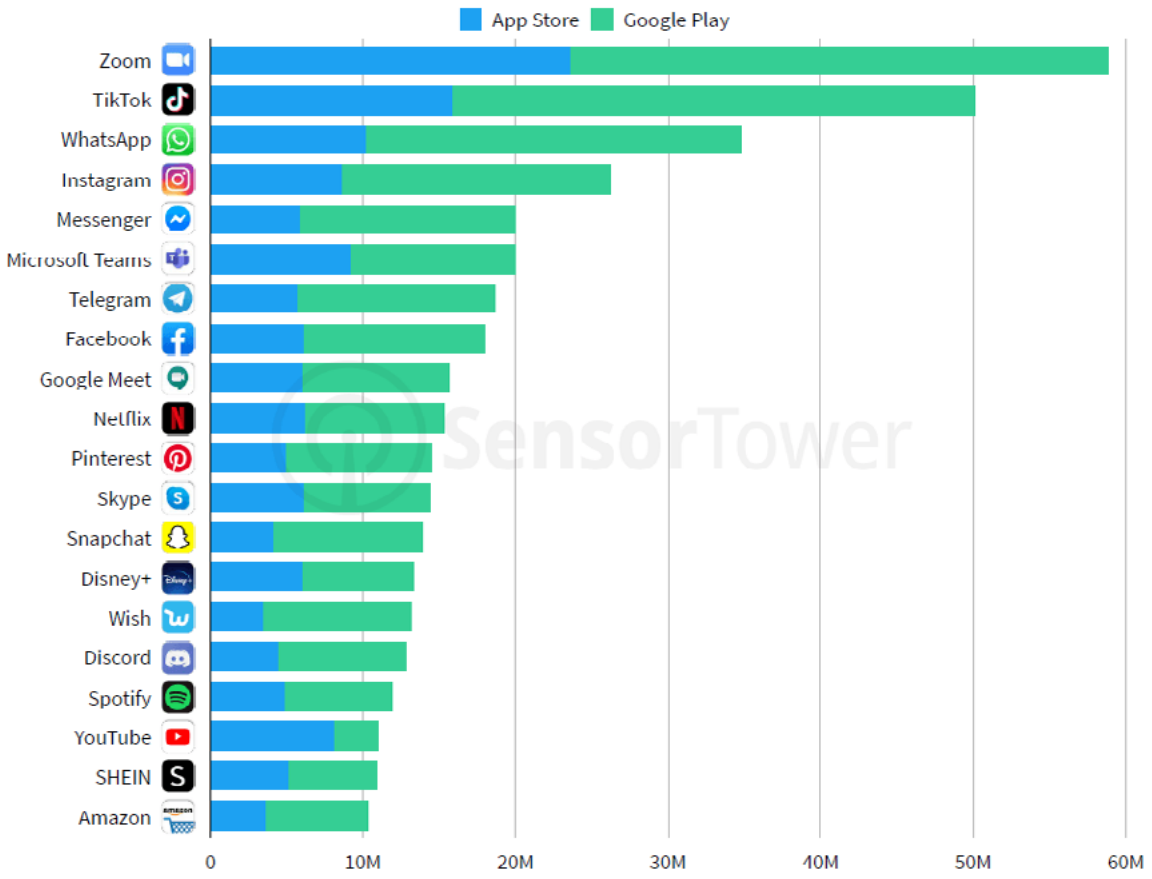
Moving to more informal apps, we also see private-forum/messenger app Discord feature among the top-20 apps by download volume in Europe in Q2 2020, with around 12-13 million downloads.

YouTube, once again, is mostly downloaded on iOS devices. It would come sixth if we were to only look at this operating system, as opposed to its overall position of 18th. This doesn't tell us a great deal, however, being an effect of its being a Google-owned app.

There are other more telling stats in this chart. Both Microsoft Teams and Zoom log a disproportionately high quantity of iOS downloads in this distinctly Android-skewed region. This gives us a demographic clue about iOS users, hinting at a greater proportion of white collar professional users.

The same applies for SHEIN, which logged 11 million or so downloads in total. This fashion-orientated app saw a rise in popularity as online shopping became the norm during this quarter for the well-dressed (and the well-heeled).

Top apps in Europe, Q2 2020 (Sensor Tower)



Data source: Sensor Tower

Towards the end of 2019, App Annie took a look back at the most-downloaded apps of the decade then coming to a close. It will come as news to few that the big four of Facebook lead the way, helmed by its flagship social network.

Other prominent names that came to define the first full decade of mobile apps also feature, such as Snapchat and Twitter, while Skype's sixth place speaks of the enduring appeal of simple apps built around a practical function. YouTube's prominence – so ubiquitous we sometimes barely notice it's there – should not be understated.

Perhaps the most striking name in the list is that of TikTok, in seventh. This reflects just how incredible a couple of years ByteDance's app – only launched globally in 2018 – has had.

Alibaba's UC Browser is the only other Chinese app to feature, though once again, these stats do not consider Chinese third-party downloads.

Most-downloaded apps of 2010s

Top 10 Apps by All-Time Downloads
Worldwide | 2010 – 2019F

Rank	Apps	Parent Company	HQ
1	Facebook	Facebook	United States
2	Facebook Messenger	Facebook	United States
3	WhatsApp Messenger	Facebook	United States
4	Instagram	Facebook	United States
5	Snapchat	Snap	United States
6	Skype	Microsoft	United States
7	TikTok	ByteDance	China
8	UC Browser	Alibaba Group	China
9	YouTube	Google	United States
10	Twitter	Twitter	United States

Note: Combined iOS and Google Play data begins in January 2012. Data through December 31, 2011 includes iOS data only; 2019F based on January to November data

Data source: App Annie

2.4 TOP APP PUBLISHERS

It will again be a surprise to no one to see that 2019's top app publisher by downloads was Facebook. In all, the Facebook family of apps registered close to 3 billion downloads between them.

The only app developer to come anywhere near Facebook in terms of aggregate app download volume was another all-too predictable name: Google. We say near, but with around 2.7 billion app downloads, there is clear daylight. That said, Google is a billion downloads ahead of third-placed ByteDance. Alongside TikTok/Douyin, ByteDance also publishes India-targeted social platform Helo, news aggregator Toutiao, and YouTube competitor Xigua Video.

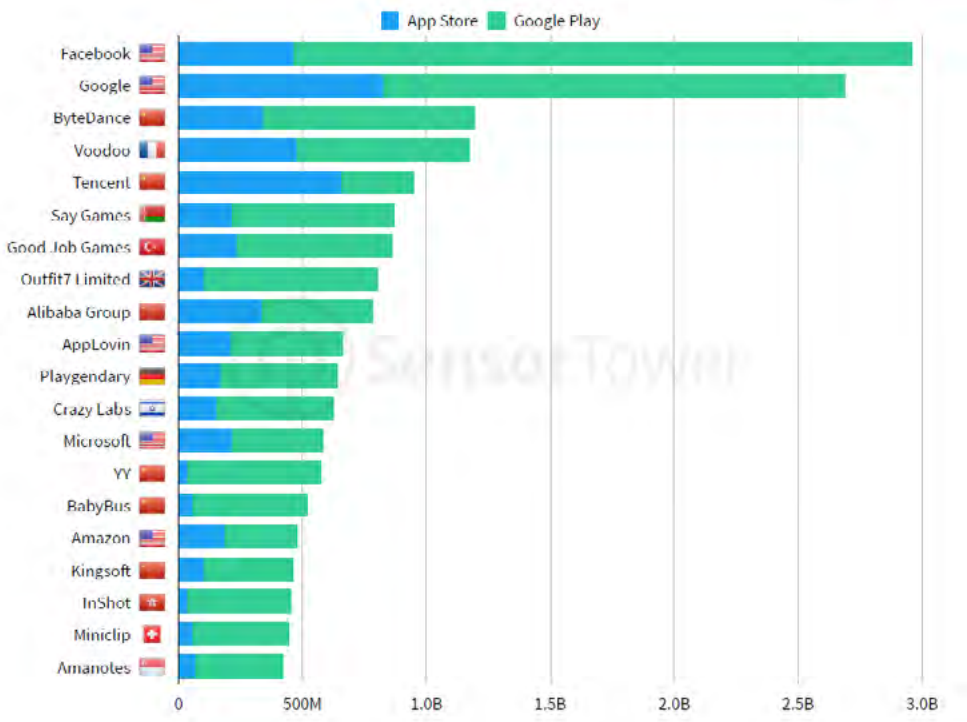
Once again, it's worth pointing out we don't have Chinese third-party Google downloads in these stats. Add these on, and ByteDance would certainly be raking in hundreds of millions if not billions more downloads. As would fifth-placed Tencent and ninth-placed Alibaba. What's interesting in this particular table, however, is the rich international mix of app publishers we see here. While China (six) and the US (five) are the best represented nations by far, we also have the French Voodoo, the Vietnamese (Singapore-headquartered) Amanotes, and the Belorussian Say Games, among others.

While they might come from diverse corners of the globe, these app developers do actually have something in common, which would be clear to readers invested in the mobile games space. Rather than being known for any major single apps, these publishers tend to develop a range of different mobile gaming apps, often in the hyper-casual category.

These allow them to rake up hundreds of millions of downloads, without necessarily becoming household names. Voodoo's success, however, has not escaped the attention of Goldman Sachs, who invested $200 million in the French company in 2018. We see a few interesting trends related to operating systems here. For instance, if we limit ourselves to iOS devices, Google comes out on top. This is likely to be a consequence of Android devices coming with Google applications preloaded. Others – for instance Chinese YY (a video-focused social network) and Slovenian Outfit7 Limited (creators of pet simulator My Talking Tom, labelled as British here) – see a surprisingly low number of iOS downloads.

The disproportionately high level of iOS downloads we see for ByteDance and Tencent in particular are once again down to the lack of Chinese third-party Google download stats. Include these, and we might see a very different picture. The fact that ByteDance ranks third without these highlights just how successful the relatively young publisher has been across the globe.

Top app publishers worldwide, 2019 (Sensor Tower)



Data source: Sensor Tower

App Annie does not provide any figures. In its top app companies of 2019, Google comes out ahead of Facebook. ByteDance again occupies third place here, though the other major Chinese publishers appear in a different order, with both Alibaba and YY ahead of Tencent.

Otherwise, similar names appear in the list, except we see Snap edging out Amanotes.

As with the top apps, App Annie separates outs the games publishers. Voodoo comes out on top here again, with Good Job Games and SayGames completing the top three (albeit in a different order).

By comparing this list to the top games, we can see how these publishers rack up their downloads through a collection of smaller apps. Of the top game companies featured here, only three have published games that appear in the top-10 most-downloaded games. Though we should add that Turkish hyper-casual game developer Good Job Games is represented three times.

Top app publishers worldwide, 2019 (App Annie)

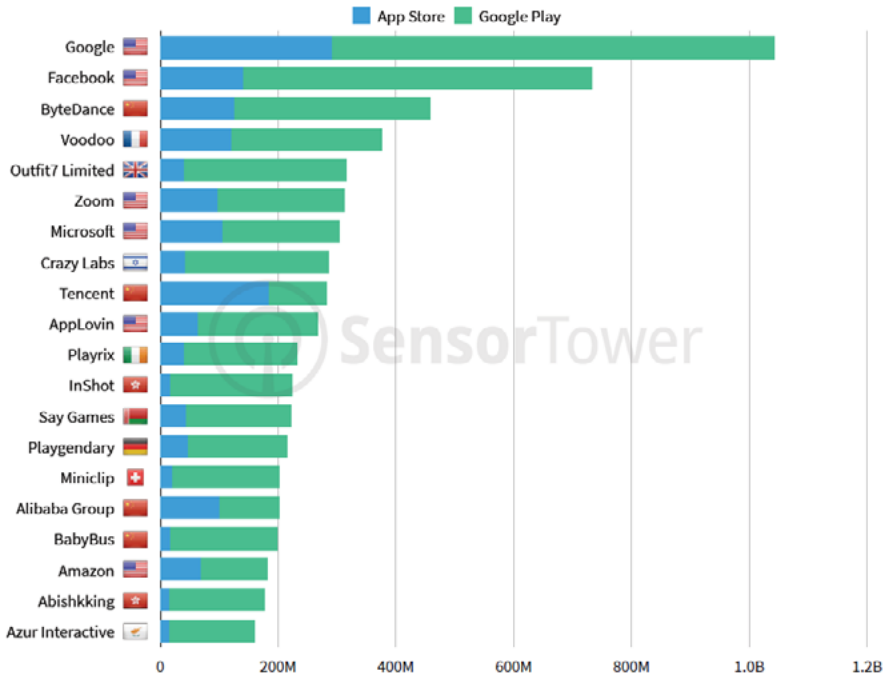
Top App Companies		Top Games Companies	
Google	United States	Voodoo	France
Facebook	United States	Good Job Games	Turkey
ByteDance	China	SayGames	Belarus
Alibaba Group	China	Outfit7	Cyprus
Microsoft	United States	Playgendary	Germany
YY Inc	China	AppLovin	United States
Tencent	China	Crazy Labs	Israel
Amazon	United States	Miniclip	Switzerland
InShot Inc	China	BabyBus	China
Snap	United States	Tencent	China

Data source: App Annie

By Q2 2020, we see Google also overtaking Facebook as the world's number one app publisher in the Sensor Tower stats. No doubt we can ascribe this to Google's suite of applications designed to facilitate remote working. Microsoft climbs the ranking for the same reason. Facebook's case is interesting. Facebook and Instagram register download volumes which, if maintained for four quarters, would comfortably exceed their 2019 totals. This would suggest a desire to somehow document how we lived in this unprecedented period and to informally stay in touch. On the other hand, its instant messenger apps have trailed off somewhat, which could be for a number of reasons: saturation, the rise of Zoom, the reduced importance of anything being 'instant'.

Speaking of Zoom, we see the eponymous parent company shoot up into sixth place in the publisher ranking.

Aside from that, we see the usual mix here of US and Chinese megacorps (Tencent, Amazon) and smaller games developers, many of which have registered significant growth compared to 2019. Of the latter, French outfit Voodoo leads the way, with nearly 400 million app downloads registered in Q2 2020. Slovenian developer Outfit 7 and Israeli Crazy Labs both rack up as many downloads in this quarter as they did over half of 2019. Clearly, app users are looking for distractions during this difficult period.



Top app publishers worldwide, Q2 2020 (Sensor Tower)

Data source: Sensor Tower

2.5 TOP APP CATEGORIES

Sensor Tower stats show that, on iOS in Q2 2020, by far the biggest app category in terms of downloads was games, registering a huge 2.7 billion app downloads. This is a 20% increase on the year before, perhaps reflecting both increased leisure time and greater need for distraction in a trying 2020.

Games register nearly three times as many downloads as the second-biggest app category of 'photo & video', which registers 700 million downloads.

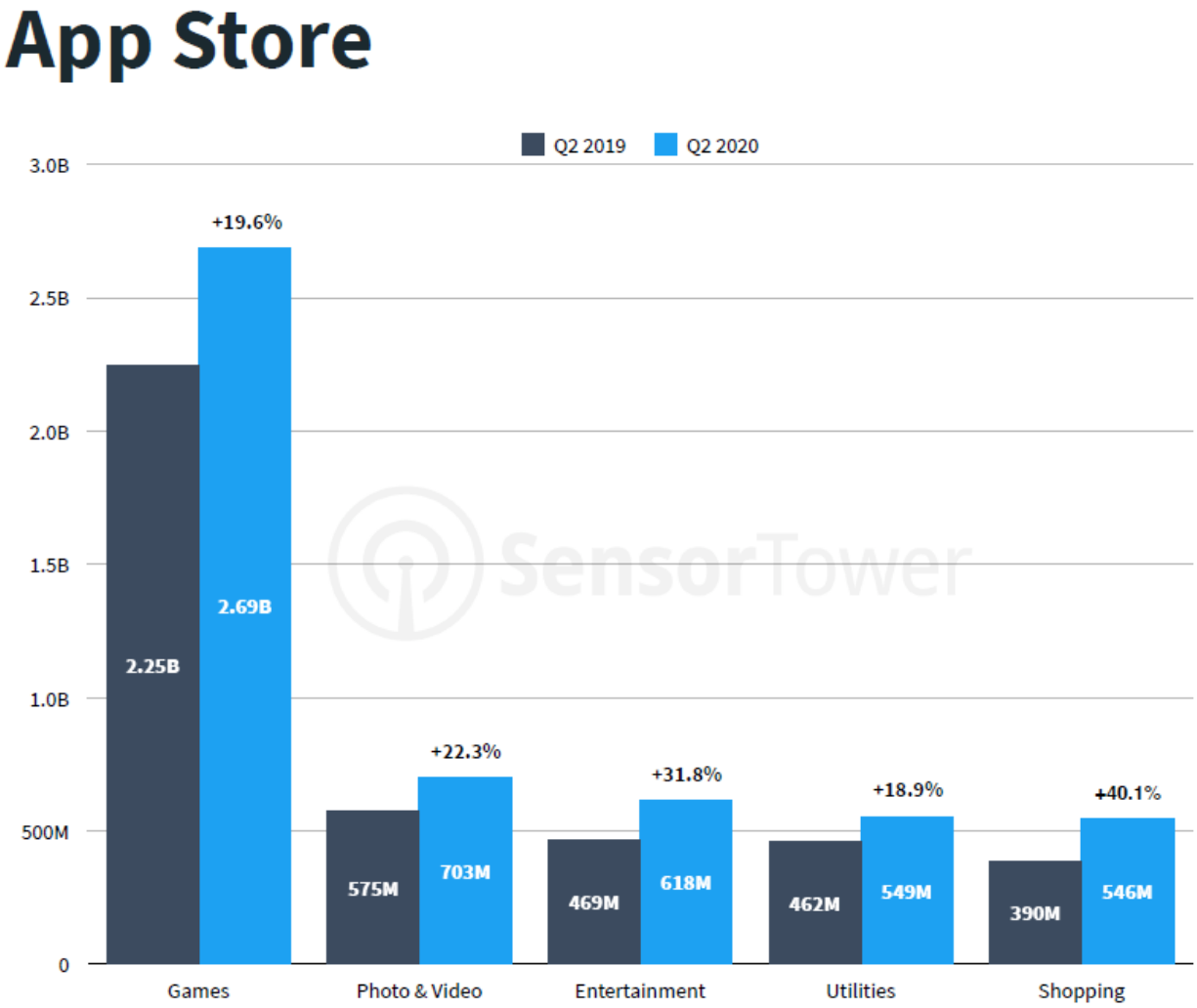
Among the top-five app categories, that which has seen the most growth is 'shopping', with a huge 40% increase in app downloads year-on-year.

The coronavirus pandemic has clearly not struck equally. Those who are able to work remotely and are in secure occupations have found themselves with an excess of disposable income. Those who do not fall into this category will have found themselves in a more precarious situation. This is of course exacerbated by differences between countries.

This considerable upswing in downloads of shopping apps (546 million in total, excluding third-party Chinese downloads) would seem to confirm the received wisdom that iPhone users tend to skew towards the former category.

It would be certainly be interesting to see to what proportion of economic activity was channelled through these apps during this period.

Top iOS App Store categories, Q2 2020 (Sensor Tower)



Data source: Sensor Tower

The disparity between games and other app categories is even more pronounced in Google Play download stats. Here, game downloads have registered an incredible 51% year-on-year increase in downloads, to total 12 billion. This is near seven times more than the second-biggest category, 'tools', in which a 25% increase gives us a total of 1.82 billion.

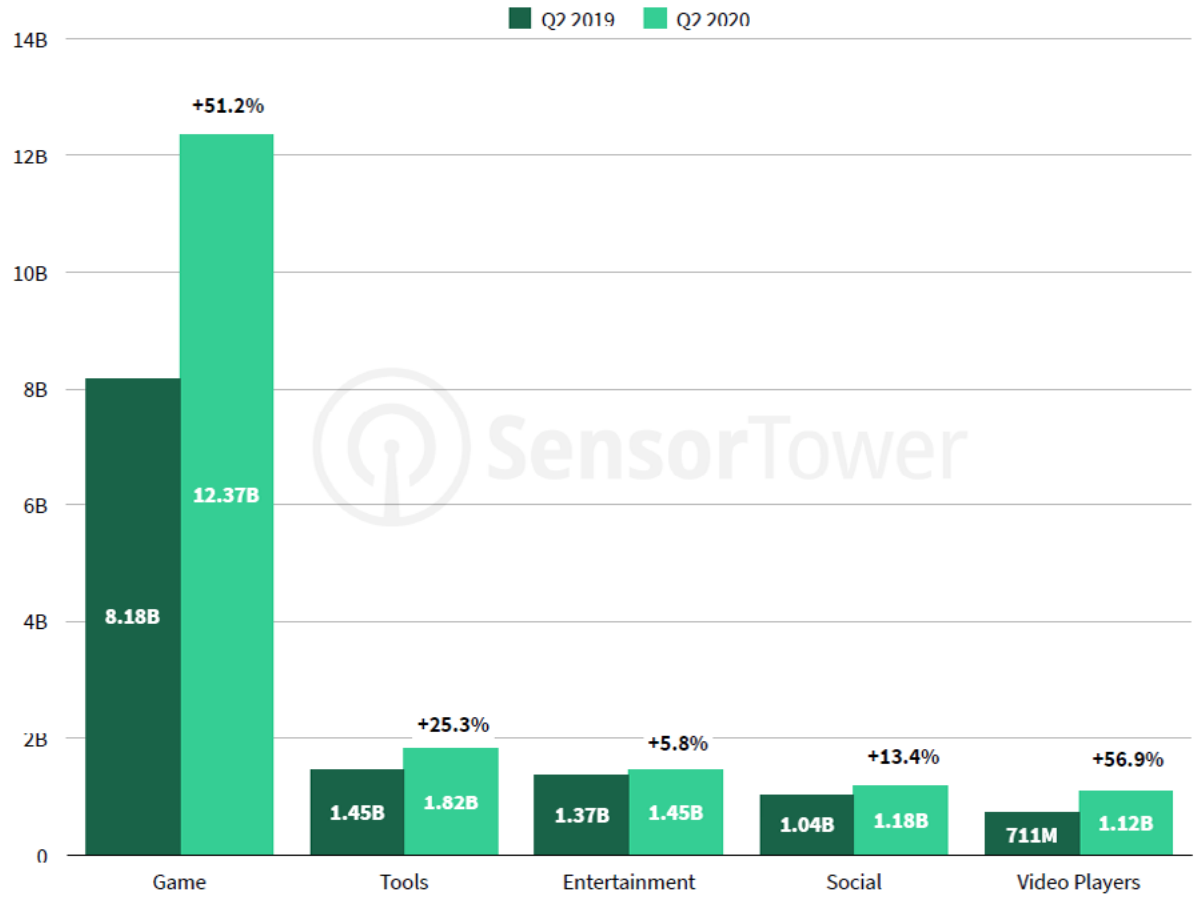
The scale of difference between the two categories was 5.5 in 2019, showing just how significant an increase this is. We might note that mobile games tend to offer ad-supported, limited, or in-app purchase models that allow users a free-point of entry. This makes such apps accessible in a time when many are left with an excess of time but a constriction in income.

The other top-five app category which registers a similar increase is video players, downloads of which have increased by 57%. We would imagine for similar reasons.

Here's another stat to give an idea of the full scale of just how much games dominate Google Play downloads. While we see nearly five times more games downloads made through the Google Play Store than the iOS App Store, second-placed 'tools' was downloaded only 2.6 times more than photo & video on iOS.

Games therefore account for most of the difference in download volume between the two operating systems.

Top iOS App Store categories, Q2 2020 (Sensor Tower)



Data source: Sensor Tower

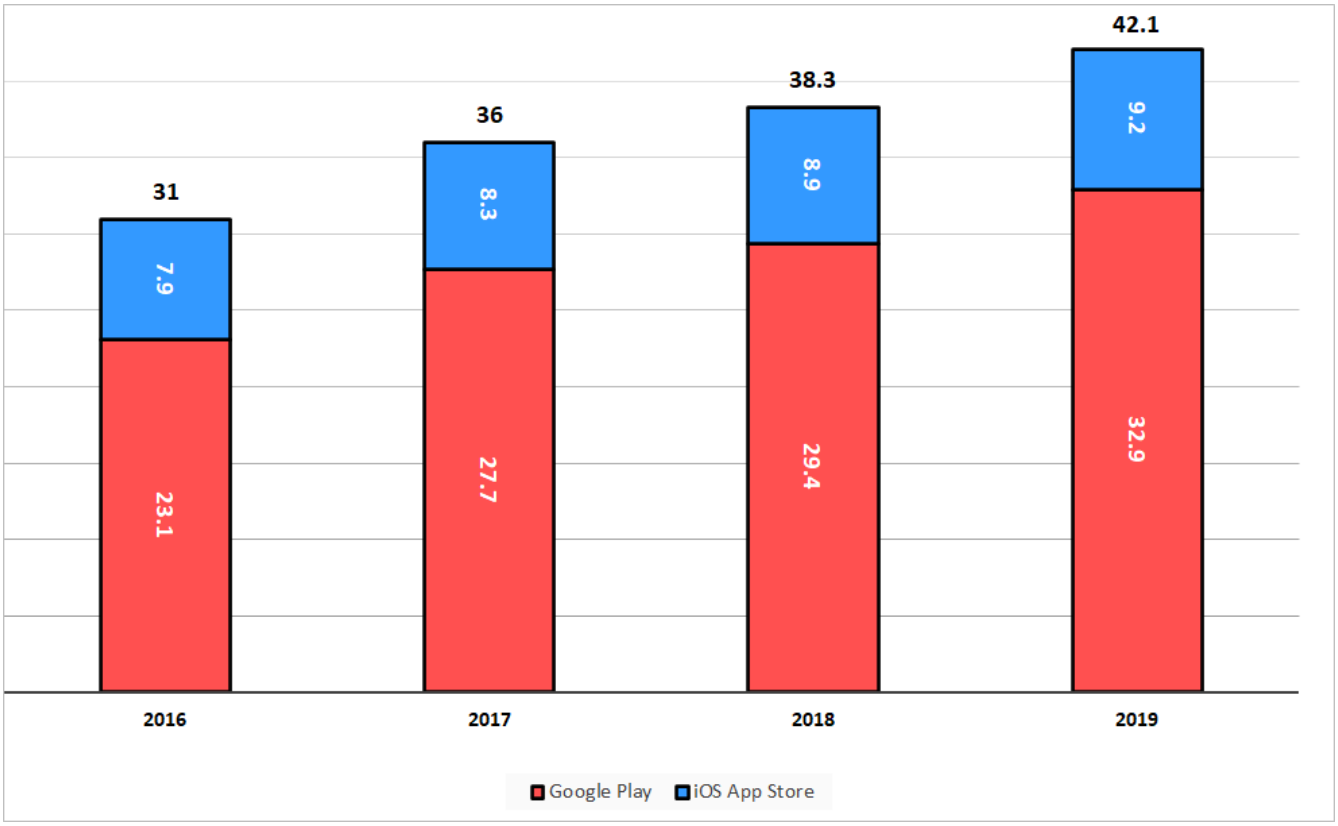
2.6 GAME DOWNLOADS STATS

Looking once again to Sensor Tower stats, we can see that the narrative for mobile games has not been quite as simple a story as that of overall app downloads. We saw a notable slowdown occurring in 2018, where the massive 16% growth in game downloads in 2017 gave way to a mere 6% the following year.

This would suggest that the slowdown in downloads of mobile games was even more pronounced than that of overall apps. In 2019, however, downloads of mobile games grew by 10% once more. We still saw a slowdown from the beginning to the end of the four-year span, but mobile game downloads were once again growing at a faster rate than overall app downloads.

That said, this may simply be an effect of strong mobile game download figures in 2017 knocking the sequence out of kilter. If we had registered, say, 34.5 billion mobile game downloads that year, we would have pretty much an even line of 10% growth (give or take) every year.

Game downloads, 2016 – 2019 (Sensor Tower)



Data source: Sensor Tower

The unevenness of four-year pattern we see here clearly makes it difficult to draw any strong conclusions about if mobile game downloads respond to overall app download figures, or whether we should consider them a law unto themselves.

Looking at these stats by app store doesn't make things much clearer. The overall trend follows the pattern of Google Play Store download growth: strong (18%) in 2017, weaker (6%) in 2018, then something of recovery (12%) in 2019. iOS App Store game downloads, however, grew at their highest rate in 2018 (6%), before falling again (3%) in 2019.

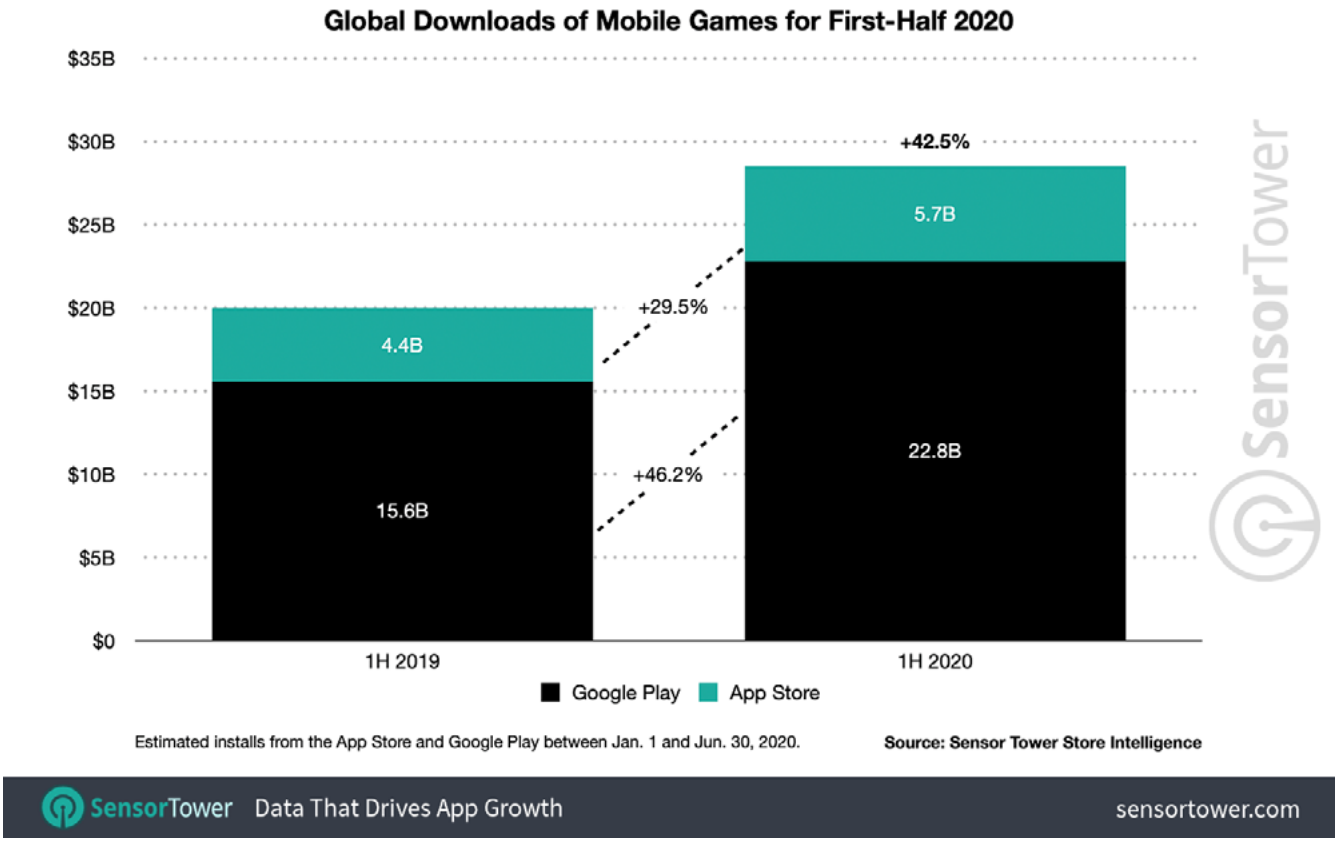
2020 will bring us no closer to any easy conclusions. In H1 2020, we saw a massive 42.5% rise in game downloads year-on-year, compared to 26% growth in apps overall. This was very much driven by growth in Google Play downloads, which grew by 46%, while iOS App Store mobile game downloads grew at (a still robust) 30%.

This increase saw total mobile game downloads of 28.5 billion in H1 2020. This compares to full-year total of 42.1 billion in 2019. We're already two thirds of the way there.

In all, Google Play game downloads account for 80% of the total in H1 2020, up on the 77-78% figure we've seen in recent years. This is slightly higher than the 72-73% of total app downloads made through the Google Play Store over the past couple of years. On the other hand, we might note that mobile revenue grew at a faster rate among iOS users.

With various restrictions continuing to be enforced across the world at this stage, it would be hasty to draw too much from this beyond the fact such (very specific, we all hope) conditions disproportionately drive growth in mobile game downloads.

Game downloads, H1 2020 (Sensor Tower)



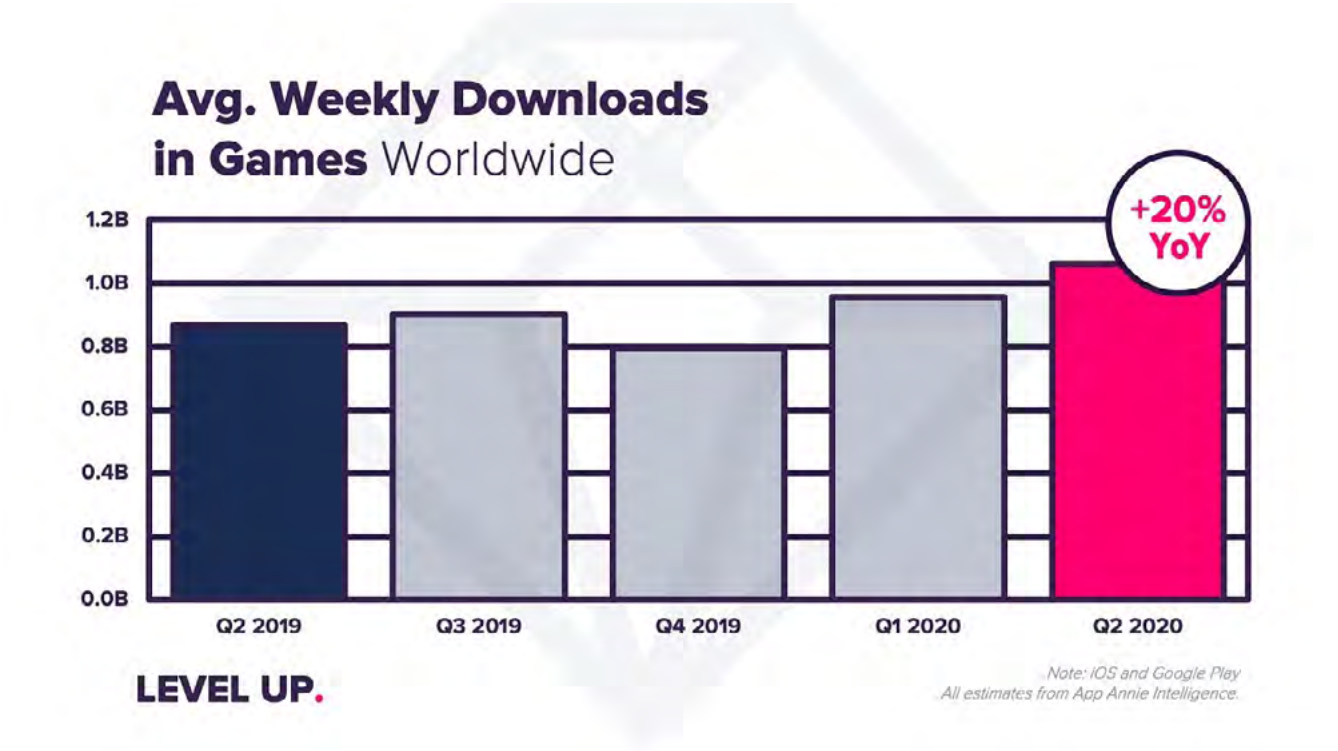
Data source: Sensor Tower

App Annie stats show a 20% increase in weekly average global mobile game downloads in Q2 2020 compared to Q2 2019. In all, over 1 billion games were downloaded every week in this unprecedented quarter.

As this below graphic shows, the narrative was not one of steady increases in the quarters running up to this one. Q4 2019 saw a dip in the figure, from around 0.9 billion to 0.8 billion.

The latter quarter seems to have been an outlier, however, with a general if slow upward trend otherwise observable.

Average global weekly game downloads, Q2 2019 – Q2 2020

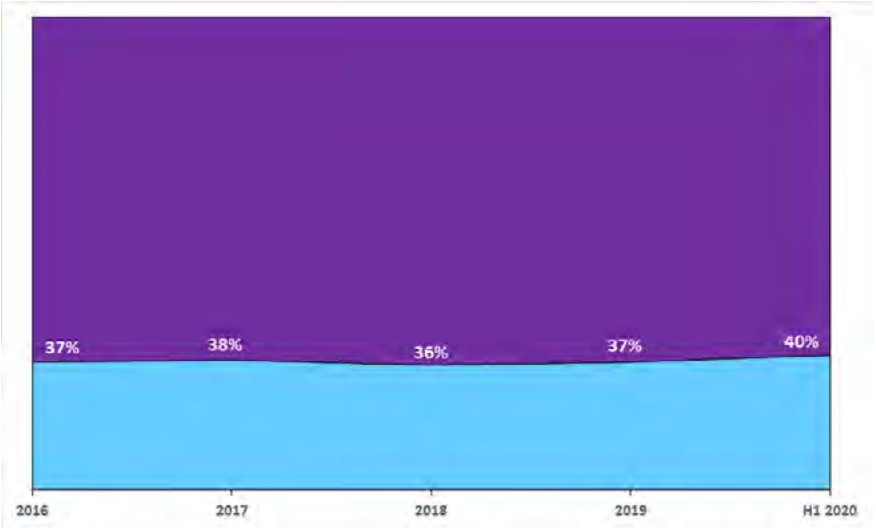


Data source: App Annie via VentureBeat

Despite the various inconsistencies of the past few years, mobile game downloads have remained fairly steady as a proportion of overall app downloads, in the 36-38% range, according to Sensor Tower stats. Certainly, this is a significant proportion, and goes to show the heightened importance mobile gaming has come to take in the app space.

This figure rose to 40% in the first half of 2020. Whether this trend will carry over into the second half of the year or even years to come remains to be seen. Certainly, the current state of the world would make it hard to make any sort of clear prediction on this front.

Game downloads as a percentage of total app downloads



Data source: Sensor Tower

Casting our gaze back to 2019 once again, App Annie stats break down game downloads of the top-100 titles by game type. Here, we can see the predominance of casual games, which accounted for 82% of total game downloads, with 'core' games accounting for the remainder.

Well over half of these casual games fall into the subcategory of 'arcade', which account for nearly half (47%) of total game downloads. The next biggest category, 'puzzle' accounts for 21%.

Of the core games, the biggest titles are 'action', which account for 8% of mobile game downloads, followed by 'shooters', at 3%. While these titles account for far fewer downloads, titles like PUBG: MOBILE, and Fortnite enjoy a certain level of cultural significance.

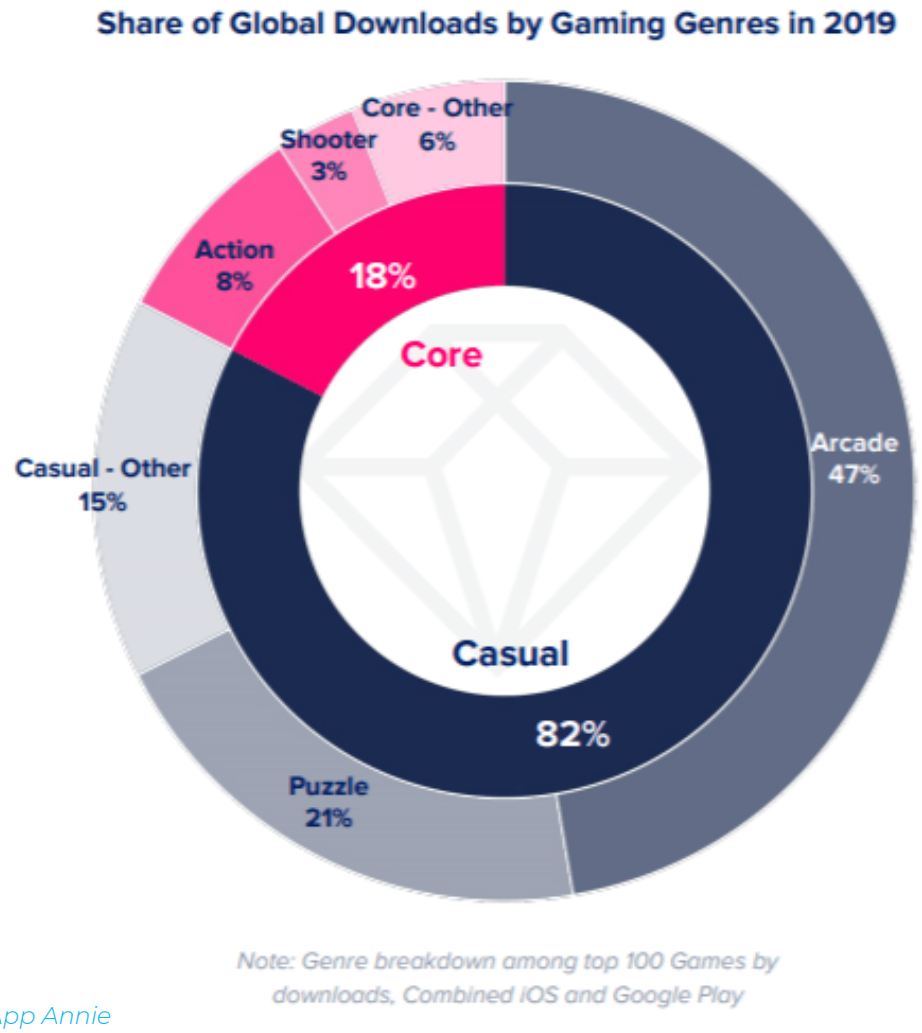
Casual titles are far less likely to be analysed in detail in The Washington Post or gain the attention of the British royal family, They are far less likely to be played at esports tournaments for prize pools of million of dollars. They are, however, likely to be found on the phones of those looking for distraction on trains, during ad breaks, or brief oases of calm during busy days.

Perhaps as a consequence of being playable in such micro-sessions, however, we find that users spend far more time overall playing core games (see games usage stats below). This is also likely to be a consequence of the demographics, with core games the preserve of core gamers, who are likely to spend a greater proportion of time gaming.

As these stats show, however, casual game users are far more numerous and diverse than the traditional gamer demographic. And as $2 billion worth of lifetime revenue for Candy Crush Saga reveals, the games may be casual, but users are still willing to spend.

These stats are combined iOS and Google Play, excluding third-party Android downloads. Hyper-casual gaming is big in China, so we would be likely to see broadly similar trends.

Game downloads by category, 2019



Data source: App Annie

2.7 TOP MOBILE GAMES

According to Sensor Tower stats, the single most-downloaded gaming app of 2019 was PUBG MOBILE, which was downloaded 285 million times over the course of the year. Garena Free Fire is not too far behind, with over 250 million downloads over the course of the year, with Subway Surfers coming in at third with around 230 million. The names match up with the App Annie stats at which we looked above. Indeed, we get much the same narrative here: shooters (many of them of the battle royale format) mixed in with a diverse range of hyper-casual games. The latter rack in hundreds of millions of downloads even with names as bland as Fun Race 3D, with a little under 220 million downloads, or Sand Balls, with over 200 million downloads.

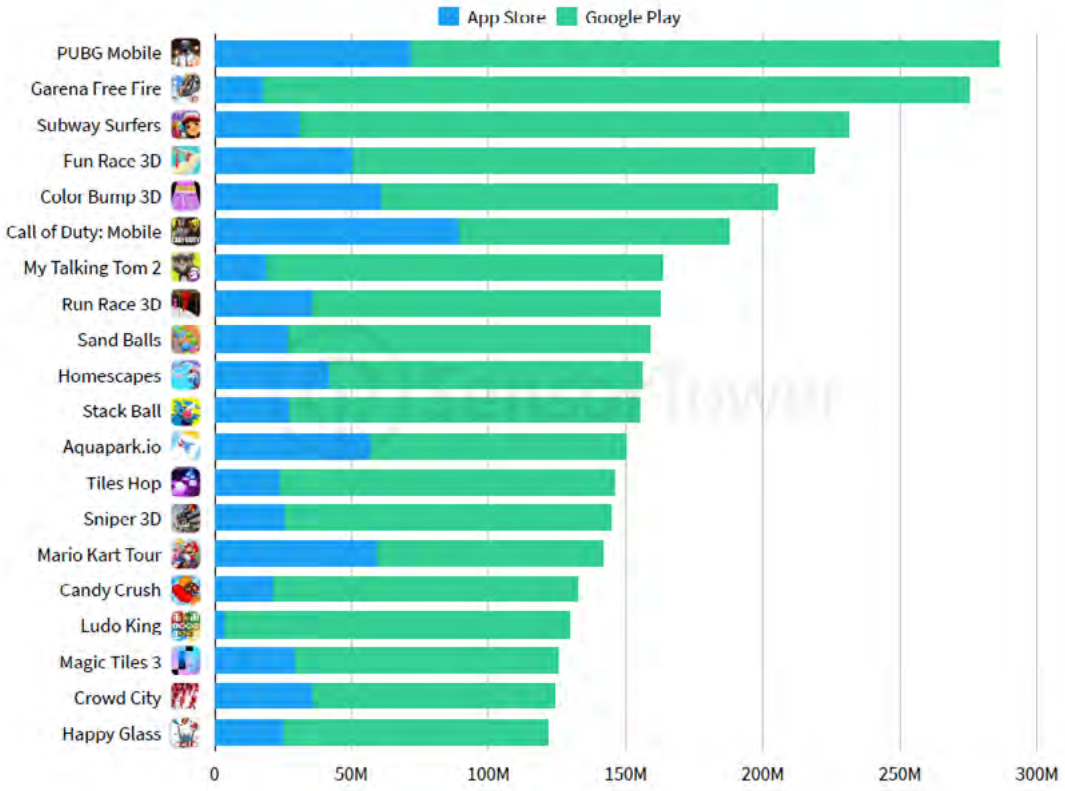
In 16th place we find the original trailblazer for this category of app: Candy Crush Saga. With around 130 million downloads over 2019, it is still seeming going strong. The app had been downloaded 2.73 billion times by late 2017, and we can imagine it's added a few since then, even if at a slowing rate. Explosive years of growth for mobile gaming now mean that these games account for the vast majority of gaming industry revenue. They also, we might note, account for the greatest share of app revenue too.

Of the old guard of gaming, Mario Kart Tour is perhaps the most obvious ambassador. This title's September 2019 release data is indication that even the most august gaming companies are now ready to acknowledge the importance of mobile gaming. That it was downloaded nearly 150 million times in a single quarter also shows that there is appetite among mobile gamers (and would-be mobile gamers) for familiar names. Speaking of familiar names, we might note that Fortnite doesn't feature on this list. Epic Games offers direct downloads on Android, so that will obviously affect the figure. Sensor Tower report elsewhere that the title had been downloaded 129 million times on the Play Store and iOS App Store collectively as of May 2020.

One last noteworthy title among those featured in this top-20 mobile games by download volume: Ludo King. This Indian-developed game, based on the eponymous board game, is a massive smash in its home nation. It was the first Indian gaming app to surpass 100 million downloads, and had surpassed 300 million downloads by January 2020, with 75 million MAU. According to this set of stats, a little over 125 million of these came over 2019.

Many users have taken to gambling on the outcomes of Ludo King. It has been criticised for treading the line on Indian gambling laws, an argument that turns on whether it is a game of skill or a game of chance. The game has even been linked to a murder, connected to an unpaid debt. That is not something that we can say about many other apps...

Most-downloaded mobile games, 2019 (Sensor Tower)



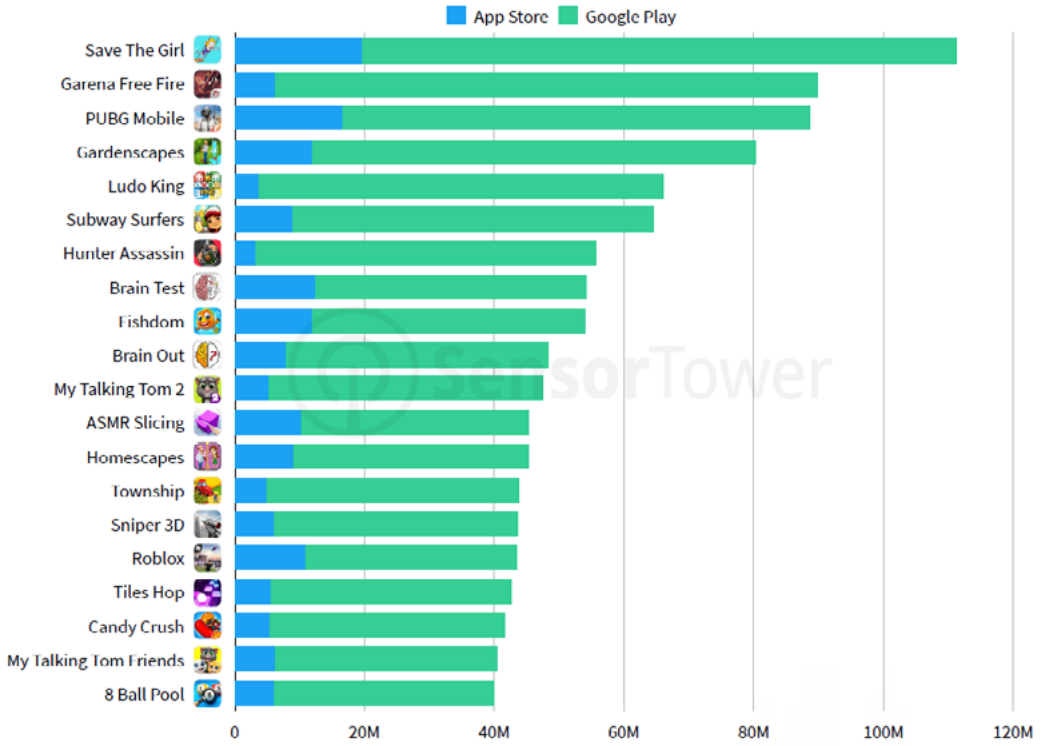
Data source: Sensor Tower

Ludo King saw a significant uptick in downloads over the course of Q2 2020. In this quarter alone it was downloaded over 60 million times, making it the world's fifth-most popular app. We might also take this as an indication of the growing ability of the Indian market to shape the global app landscape.

At the top of the pile for Q2 2020, was simple puzzle title Save the Girl, with over 110 million app downloads. If we needed further confirmation of the distorting effect of this quarter, that figure would be it. Last year's top apps Garena Free Fire and PUBG: MOBILE also log strong figures, in this case both around the 90 million mark.

Aside from the inflated figures and the new leader in downloads, the list holds few other surprises, albeit ASMR Slicing seems to represent a new category of hyper-casual game, incorporating the bizarre, sensuous world of ASMR.

Most-downloaded mobile games, Q2 2020 (Sensor Tower)



Data source: Sensor Tower

As well as looking at the most-downloaded apps of the decade, App Annie also published a list of the most-downloaded mobile games of the decade.

First among these is Danish developer Kiloo's Subway Surfers. Released in 2012, the 'endless runner' app continued to rank among the top-three most-downloaded mobile games in 2019. Another triumph of Danish design, clearly. Subway Surfers topped 2.5 billion lifetime downloads in May 2019. A little over a year later, Kiloo were marking 3 billion. App Annie reports that 15% of these downloads were generated in India.

The game's longevity tells us something about mobile gaming: a compelling title with a community around it can seemingly persist for longer than we could ever imagine a traditional console title doing so. This is perhaps also a reflection of a different revenue model and the ability to consistently update titles, that only came with the latest generation of consoles.

Temple Run in third is another representative of the endless run category, while second-place Candy Crush Saga is the leading light of the hyper-casual genre. This truly opened up gaming to new demographics, with your mother as likely to play it as your nephew.

By some accounts, it is a surprise that it does not top the list, with 2.73 billion lifetime downloads reported in 2017, though a certain quantity of these were on Windows OS for desktop.

As well as other hyper-casual titles (Fruit Ninja in ninth for example) and other endless runners (Minion Rush – the closest thing we have to a celebrity title), we see a strategy game (Clash of Clans) and two virtual pet simulators (My Talking Tom and Pou) which may make the Tamagotchi owners of the past feel a twinge of nostalgia.

Most-downloaded mobile games of 2010s

Top 10 Games by All-Time Downloads
Worldwide | 2010 – 2019F

Rank	Games	Parent Company	HQ
1	Subway Surfers	Kiloo	Denmark
2	Candy Crush Saga	Activision Blizzard	United States
3	Temple Run 2	Imangi	United States
4	My Talking Tom	Outfit7	Cyprus
5	Clash of Clans	Supercell	Finland
6	Pou	Zakeh	Lebanon
7	Hill Climb Racing	Fingersoft	Finland
8	Minion Rush	Vivendi	France
9	Fruit Ninja	Halfbrick	Australia
10	8 Ball Pool	Miniclip	Switzerland

Note: Combined iOS and Google Play data begins in January 2012. Data through December 31, 2011 includes iOS data only; 2019F based on January to November data

Data source: App Annie

2.8 OTHER APP CATEGORY DOWNLOAD STATS

Shopping app download stats

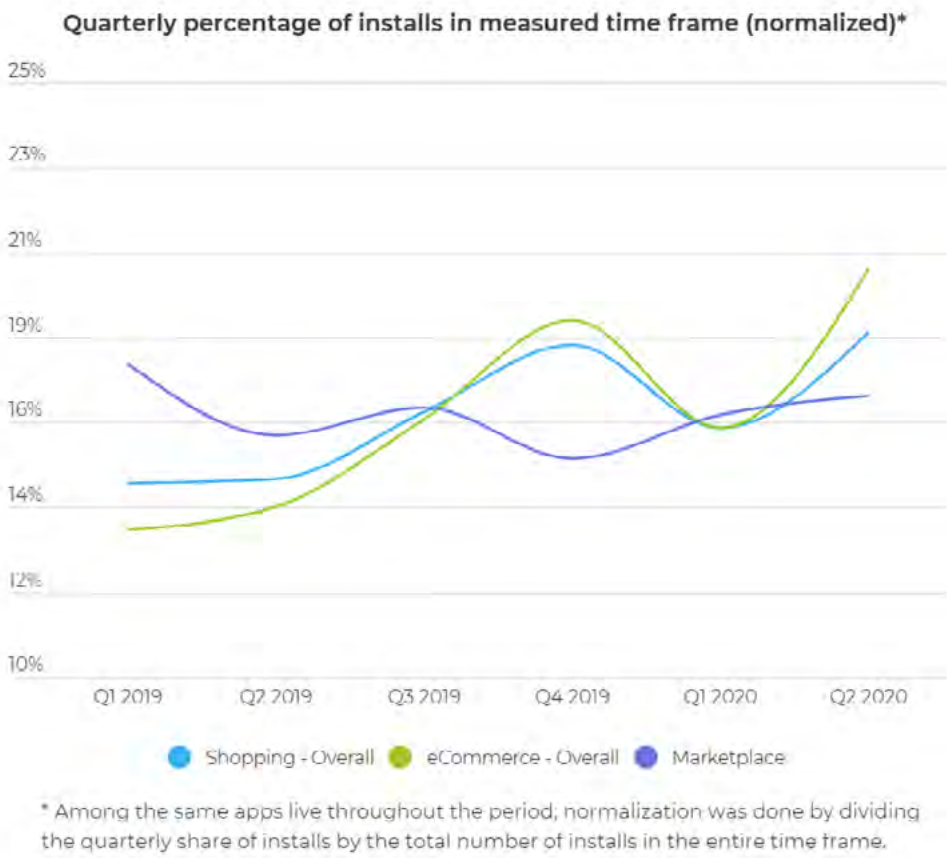
App Annie stats show that downloads of shopping apps rose by 20% in 2019 to take total downloads for the year to 5.4 billion on Android alone.

AppsFlyer stats break down shopping app downloads between Q1 2019 and Q2 2020 by quarter, telling us what percentage of total downloads over this 18 month period occurred in each. These are broken into three categories: shopping, ecommerce, and marketplace.

This allows us to map the effects of the pandemic against the Q4 seasonal rush. We can see that 20.3% of downloads of ecommerce apps in this 18 month period came in Q2 2020, compared to 19% in Q4 2019. For shopping apps, 18.7% occurred over peak lockdown months, compared to 18.4% in Q2 2019.

AppsFlyer also points to a 25% increase in downloads of ecommerce apps between Q1 and Q2 2020. This compares to a 4% increase in pandemic-free Q2 2019. Marketplace apps behave differently, with no Q4 rush or Q2 2020 surge. Indeed, the greatest share of downloads for this app category came in Q1 2019, with 17.9% (Q2 2020 accounts for 17.1%).

Percentage of 18-month downloads of shopping apps by quarter, Q1 2019 – Q2 2020



Data source: AppsFlyer

In the US, we saw an 80% increase in ecommerce app downloads in May compared to February 2020.

In the APAC region, marketplace apps have seen the greatest increase in downloads, with a 43% increase between November 2019 and March 2020. Ecommerce apps were not far behind, seeing 36% growth in downloads between April and July 2020.

Marketplace apps also saw increased downloads during lockdown in Latin America, with a 35% increase between February and May 2020. In Europe, we saw a 35% increase in ecommerce downloads between March and April 2020, with May seeing more downloads than the November 2019 pre-Christmas peak

Medical app download stats

App Annie stats show that, in a reflection of the times, over the months of lockdown we saw a surge in downloads of medical apps. These country-by-country stats compare downloads in the 'peak' local month with January 2020, which is taken as a control month.

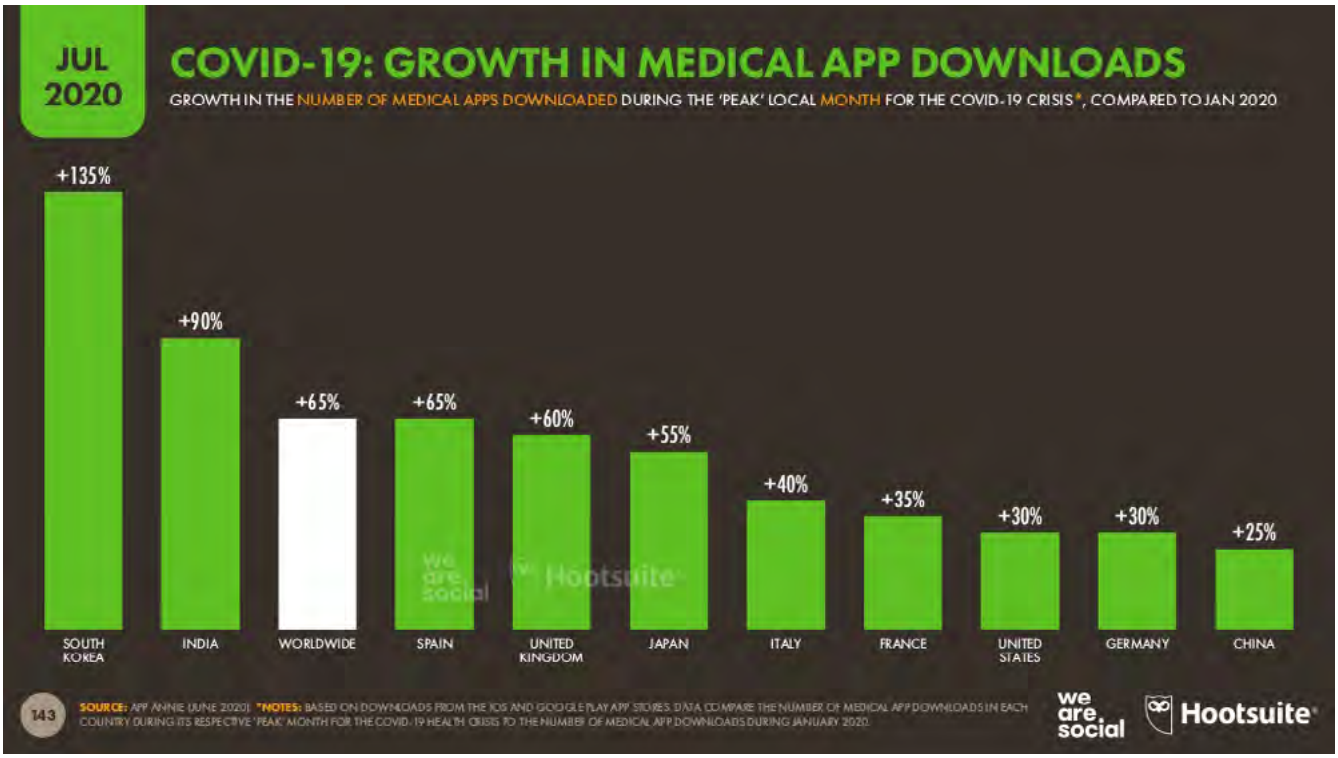
The global average figure is 65%. This figure tells us a few things. First and most-obviously, the level of fear felt around the world in these difficult months. Secondly, that users are turning to apps to get information to help them navigate periods of uncertainty. And thirdly, that public authorities are utilising apps as a platform to manage and track the outbreak.

The largest increase seen on a national level was in South Korea, where we saw a 135% upswing in downloads. The official tracking app may have accounted for a good portion of this. We might also read this as a general reflection of the market's openness to tech solutions.

India's official tracing app might be also be responsible for the 90% upswing we see in that market. This is also perhaps reflective of its status as a mobile-first market.

We see lower but still noticeable increases in the European and North American markets. We might note that in the UK, the official tracing app only launched in earnest in September 2020. In this light, the 60% increase reflects the public's desire to seek information and to connect with the strained health services through alternative channels.

Growth in medical app downloads, peak lockdown month vs January 2020



Data source: App Annie via Hootsuite/We Are Social

Education app download stats

A similar analysis for education apps shows a 90% increase on average, during peak months (as above, calculated on a national basis).

MOOC (massive open online course) providers such as Coursera and Udemy have been around for some years now, offering flexible short courses in partnership with leading universities. 2020 has seen users turn to these courses in their droves. This may be a bid to pass the time in an edifying manner, or it may be to upskill in readiness for what is set to be a tough post-pandemic economic climate.

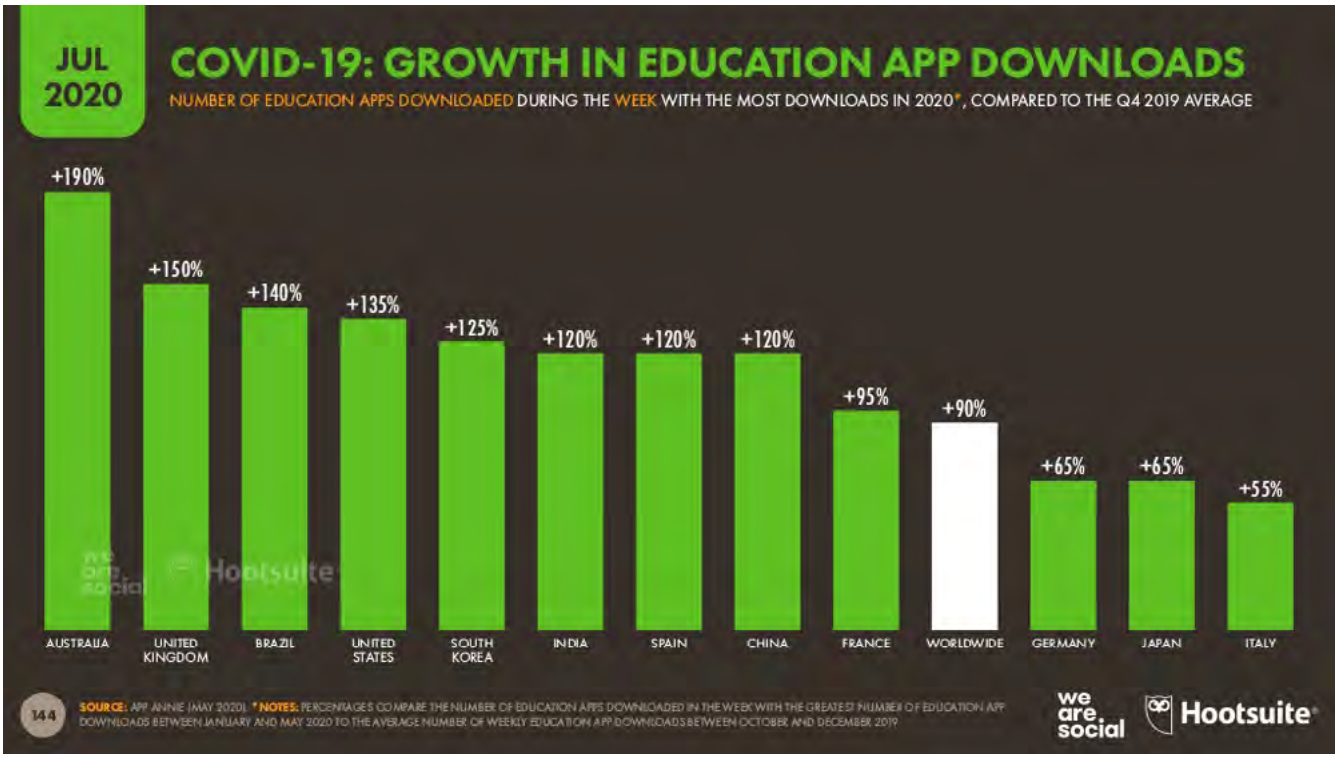
These providers are strongly geared towards English-language provision. This is reflected in the nations which have most keenly taken to downloading these apps. Australia leads the way, with an incredible 190% increase in downloads. Australian universities, we might note, have been keen to embrace this new form of education delivery, so would-be students here will be met with a raft of familiar names. Australia is followed by the UK with 150%, while the US is fourth with a 135% increase in downloads of education apps.

Brazil and India, as is consistently the case in these app stats, also log high figures (140% and 120%). The highly-digital Asian markets of China (120%, excluding Android third-party) and South Korea (125%) similarly register high figures, as expected.

Interestingly, however, we also see many nations that are traditionally slightly more conservative in terms of app adoption also log considerable increases. We might look here at the 95% figure in France or the 120% in Spain. Even the below global average figures logged in Japan and Germany (65% each) are not insignificant.

Clearly, spending the lockdown in a positive way by learning and upskilling is something of universal appeal.

Growth in education app downloads, peak lockdown month vs January 2020



Data source: App Annie via Hootsuite/We Are Social

Just as a quick snapshot of how things look a bit later in the pandemic timeline, here are the top education apps as of August 2020. We can see as of this point, Google has something of a monopoly over the market, with Google Classroom and YouTube Kids leading the way.

The former tops both the iOS App Store and Google Play charts, no doubt as a reflection of the continued need to facilitate socially-distanced education. It was downloaded 15.3 million times in August (4.8 x August 2019), 22% of which were in India, and 16% in the US. The latter was downloaded 9 million times (+28% on August 2019), 23% of which were in India, and 11% in Brazil.

Pre-vacation favourite Duolingo was the third most-downloaded app, as users of all ages used the lockdown to build language skills. In fourth, we find Polish peer-to-peer learning app Brainly, which reported 250 million MAU in September 2020, and in fifth we find the colourful Toca Life World, a series of minigames aimed at stimulating the imagination of young children.

Top education apps, August 2020

Top Education Apps Worldwide for August 2020 by Downloads

SensorTower

	Overall Downloads	App Store Downloads	Google Play Downloads
1	Google Classroom	Google Classroom	Google Classroom
2	YouTube Kids	Canvas Student	YouTube Kids
3	Duolingo	Toca Life World	Brainly
4	Brainly	Duolingo	Duolingo
5	Toca Life World	Remind	Cake
6	Cake	Photomath	Tips For File Transfer
7	Tips For File Transfer	YouTube Kids	U-Dictionary
8	Photomath	PictureThis	Toca Life World
9	U-Dictionary	Himalaya	Baby Panda World
10	Baby Panda World	Flipgrid	Toca Kitchen 2

Note: Does not include downloads from third-party Android stores in China or other regions.

SensorTower Data That Drives App Growth sensortower.com

Data source: Sensor Tower

Streaming app download stats

As we might expect, the most-popular streaming app of August 2020 is Netflix (registering 19.2 million downloads, 17% of which came from the US), followed by YouTube and Amazon Prime video. YouTube counted 17.7 million downloads, 23% of which were in the US. Google's app tops the download charts for the iOS App Store, possible as a consequence of this surge of US downloads.

YouTube Kids features here in fourth as well as being prominent among education app downloads (demonstrating the crucial dual role it must be playing in many parents' lives), while Twitch in sixth has been noted for high levels of usage during the months of lockdown.

The power of Asian markets is evidenced by the presence of the Chinese Tencent Video and iQIYI and the Indian ZEE5 and Hotstar. This is even without Chinese third-party downloads, which would certainly have given a boost to the former pair.

Disney+ props us the top-10, showing some staying power after the initial buzz has worn off somewhat.

Top streaming apps, August 2020

Data source: Sensor Tower

Finance app download stats

Downloads of finance apps have been steadily increasing over the last few years. As with so many other app categories, coronavirus seems to have contributed to greater than expected growth.

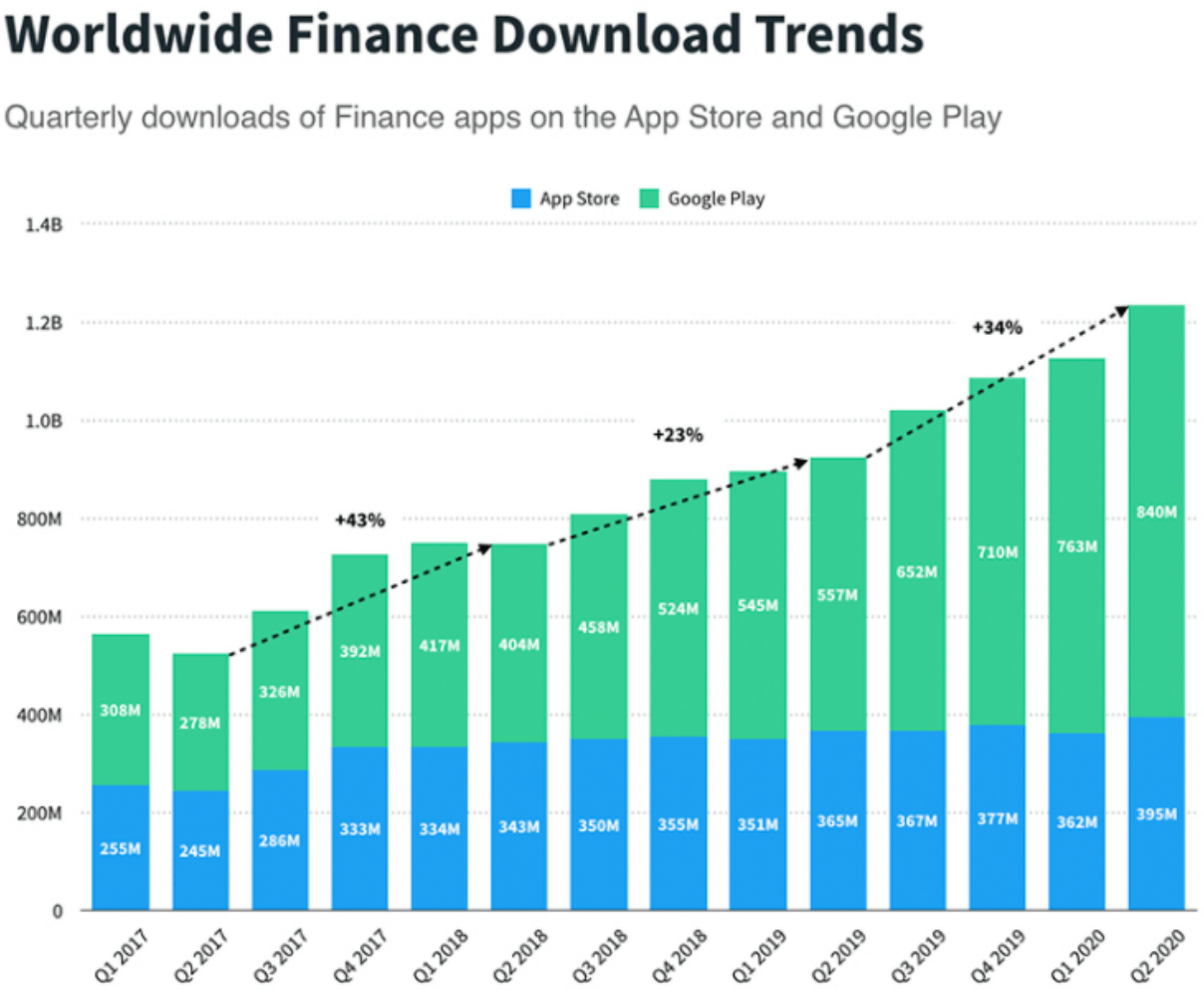
According to Sensor Tower stats, we saw 1.24 billion downloads of finance apps in Q2 2020, 840 million of which were made through Google Play compared to 395 million through the iOS App Store.

This higher than average proportion of iOS downloads is perhaps once again a reflection of the demographic characteristics of iOS compared to Android users (likely to be higher-income, from advanced economies, less likely to be reliant on cash). We might also note, however, a reflection of a shifting global landscape, as the proportion of Google Play downloads of finance apps relative to iOS steadily grows.

We can see that the strongest year for growth in the range of years included in the below analysis was between Q2 2017 and Q2 2018, at 43%. Growth slowed the following year (23%) and would most likely have continued to do so, had the events of Q2 2020 not transpired as they did.

Clearly, with normal life so deeply compromised, the solution to which many have turned to manage their money is finance apps. Included under this designation are traditional banking apps, fintech, payments apps, and investing apps.

Quarterly finance app downloads, Q1 2017 – Q2 2020



Data source: Sensor Tower

2.9 APP DOWNLOADS FORWARD FORECAST

Sensor Tower stats looking forward to 2024 predict that, by that year, total annual app downloads will come to 184 billion per year, growing at a CAGR of 9.8%. Naturally, this figure has been inflated by COVID-19, with the biggest increase in both proportional (22%) and absolute terms (25 billion) occurring in 2020 as compared to 2019.

Indeed, the destabilising effects of 2020 will mean after a sharp rise in iOS App Store downloads in 2020, we will see a small contraction in 2021, according to these predictions. Growth will then pick up again at more modest levels, with a CAGR of 7.8% leading us to 45 billion annual iOS downloads by 2024. This represents a nearly 50% increase over 2019, though only 15% over 2020.

iOS app download growth is set to rise at a faster rate than Google Play downloads in 2020, 26% compared to 20%. This would suggest that the pandemic is having a greater effect on the behaviour of iOS users, while Android users remain relatively (doing a lot of heavy lifting here) closer to normal behaviour. Again, this may be a consequence of demographic trends.

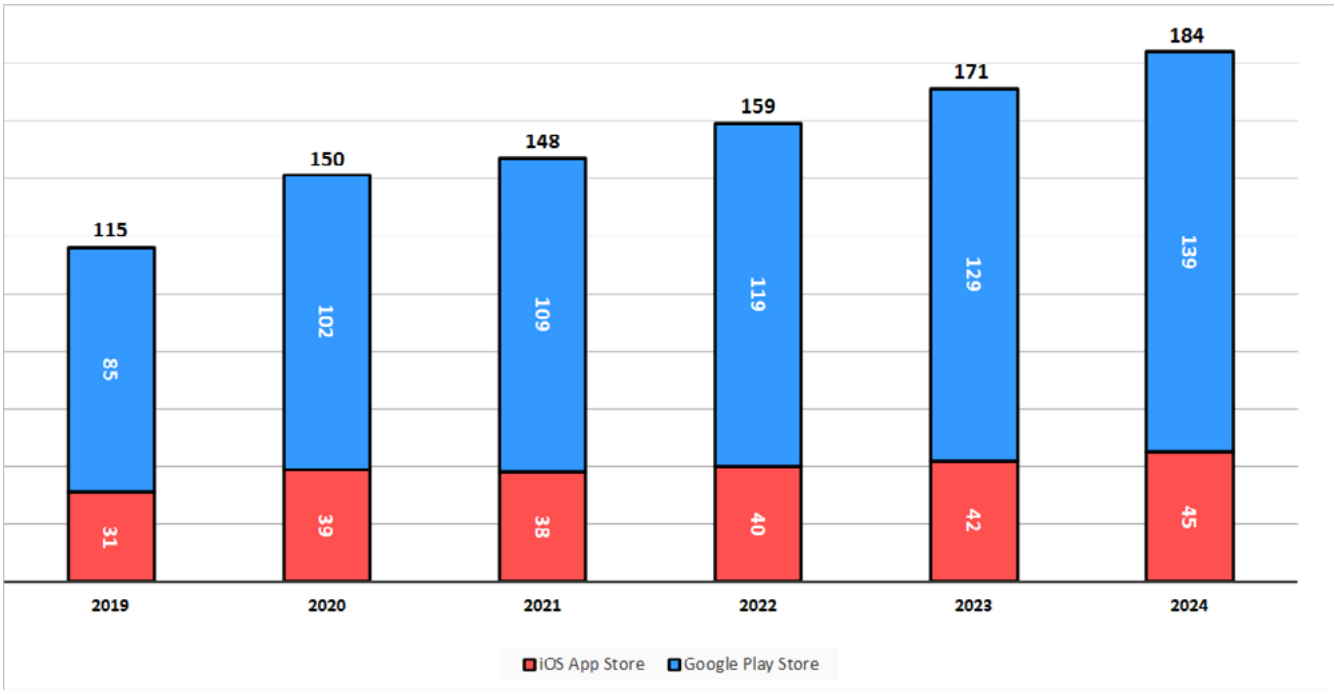
In the long-term, we will see Google Play downloads grow at a greater CAGR of 10.5%, with slowed growth rather than a contraction in 2021. By 2024, total Google Play downloads are estimated to reach 139 billion.

These figures predict that the proportion of iOS downloads will increase to 28% (from 27%) of total downloads in 2020, before falling to 24% by 2024 as the natural order of things is restored.

These figures were published in the relatively early days on the pandemic (April 2020). At the time of writing (September 2020) the end is not yet in sight. It would be not be too great a surprise at this stage to see the consequences and effects of COVID-19 roll over into the new year.

As usual, these figures are exclusive of third-party Android downloads.

Predicted app downloads, 2020 – 2024, billions



Data source: Sensor Tower

3. APP USAGE STATISTICS

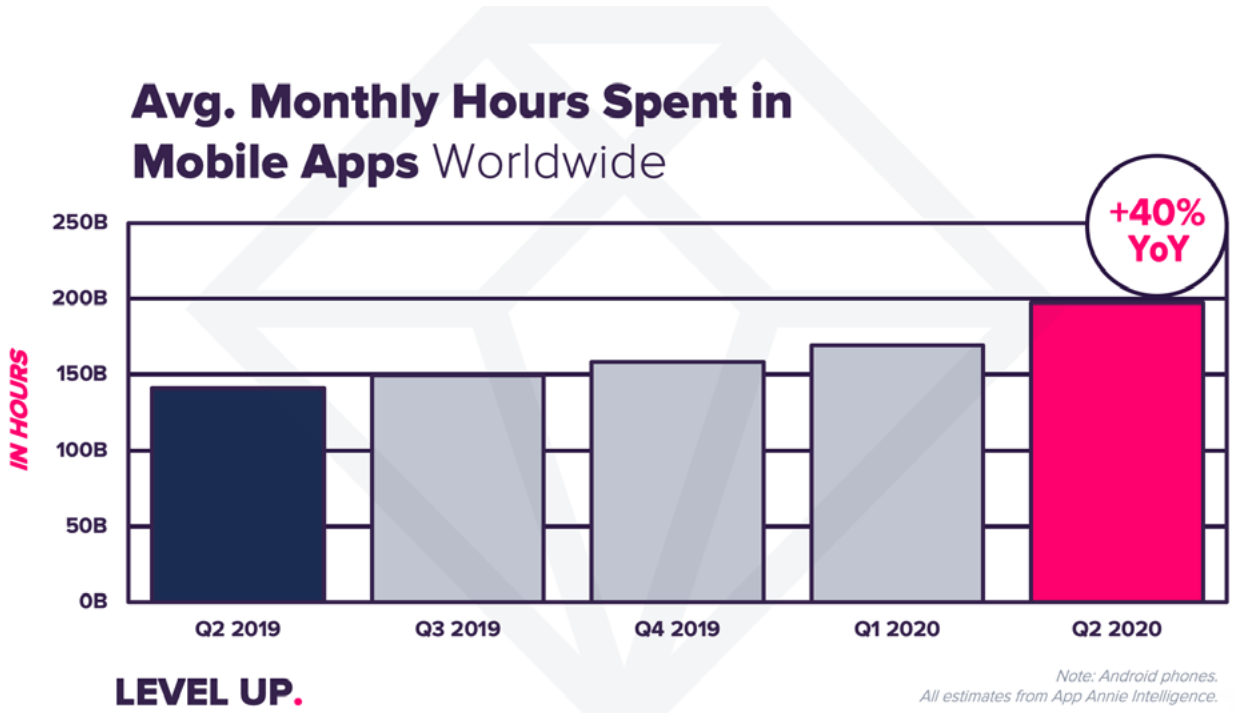
3.1 APP USAGE STATISTICS OVERVIEW

App Annie stats show that Q2 2020 was, as we might expect, a record quarter for app usage. With the coronavirus lockdown in full effect in many parts of the world, users were spending longer with their mobile devices than ever before.

This served to catalyse an already existing upward trend in the time we spend with apps, reflecting the increasingly central part they play in our lives. With said lives severely restricted in an attempt to stem the tide of the pandemic over the spring months, naturally we turned more and more to apps in order to conduct our daily business, find some distraction, and stay in touch.

Looking at Android phones alone, in each of the three months of Q2 2020, users around the world spent a collective average of 200 billion hours using mobile apps. This represents a 40% increase year on year.

Average global monthly time spent with mobile apps, Android only, Q2 2019 – Q2 2020



Data source: App Annie

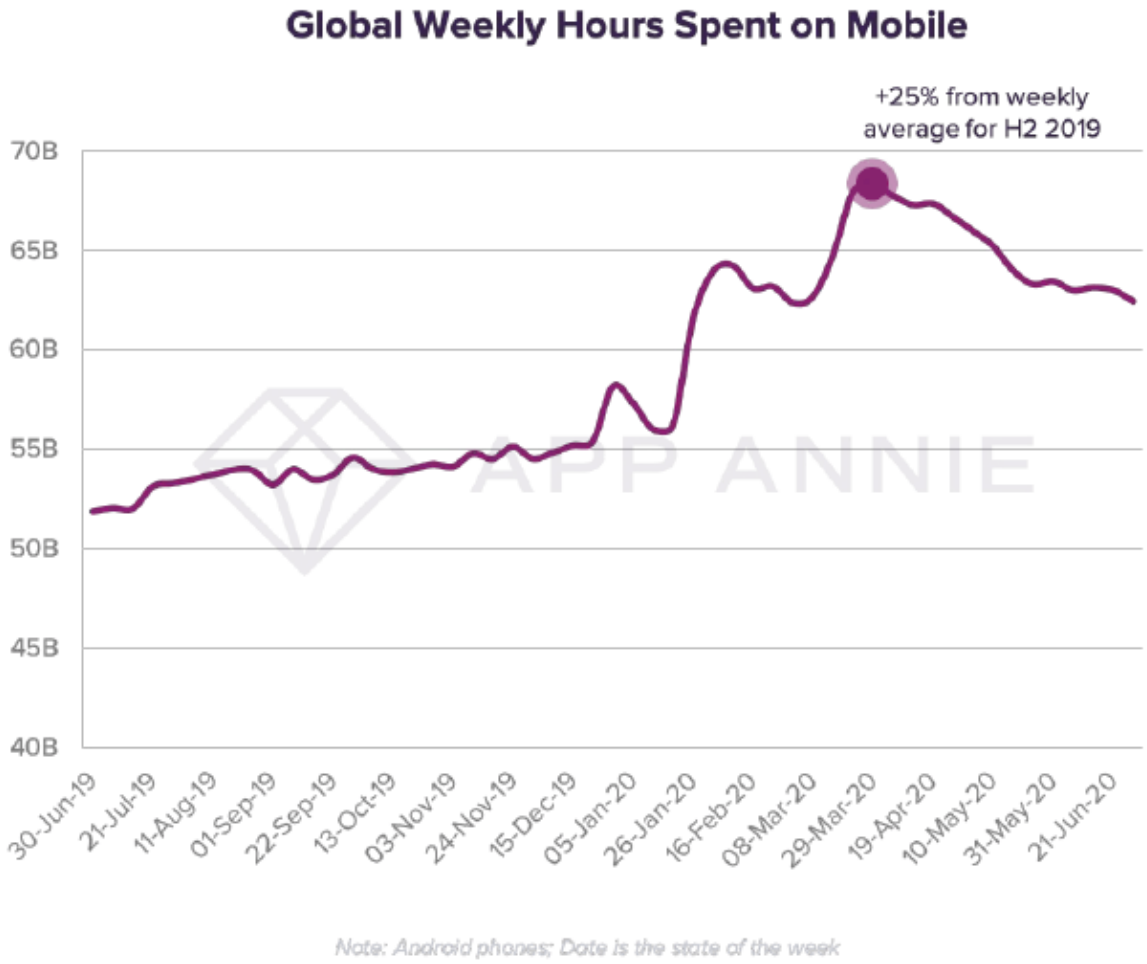
Widening the timescale to the first half of 2020, App Annie stats show that users collectively spent a total of 1.6 trillion hours using mobile devices across the six months in question. Again, these figures are Android only.

As we can see, we saw a clear spike upwards in February as the coronavirus pandemic began to bite, and then another ratchet upwards at the end of March as lockdown was imposed across the Western world. The figures logged in that peak week were 25% higher than the weekly average logged in H2 2019, with close to 70 billion hours spent with mobile devices across the globe every week.

In the weeks following this peak, we see the figure gradually erode as lockdowns were relaxed, though they never go below mid-February levels. Levels are at around 10 billion hours more than we were seeing a year prior.

The narrative arc of the second half of the year hinges on the how different markets react to the still very present risk of a second wave of coronavirus. And of course, how big a wave it is...

Global weekly mobile app usage time, July 2019 – June 2020



Data source: App Annie

3.2 APP USAGE BY COUNTRY

App usage by country: 2019

According to App Annie stats from its State of Mobile 2020 report, we see higher levels of daily device usage in emerging markets than we do in mature ones. These markets are mobile first, so this is as we might expect.

Indonesia leads the way, with daily usage levels at around 4 hours 40 minutes in 2019. This represents 20% growth since 2017.

In second, we find China, with average daily usage time of a little under 4 hours. Here we saw astounding growth, of 60% over the same two-year period. China is classed as a mature market here, but really it is a hybrid market. While so-called Tier 1 and 2 cities (Beijing, Shanghai, Shenzen, etc) are hyper-modern, much of the country, particularly in rural areas or smaller cities, have more in common with an emerging market.

This shift could then indicate a clear trend towards daily life being conducted more and more on mobile apps in either context. New apps and features such as the introduction of the WeChat Mini Program, or Douyin (TikTok) are likely to have contributed to this.

India, Canada, and France have also seen significant growth since 2017, with users in each spending 25% more daily time with their mobile devices. The leap up in India after small decline in 2018 might be attributed to 2019 being an election year in this WhatsApp-orientated market.

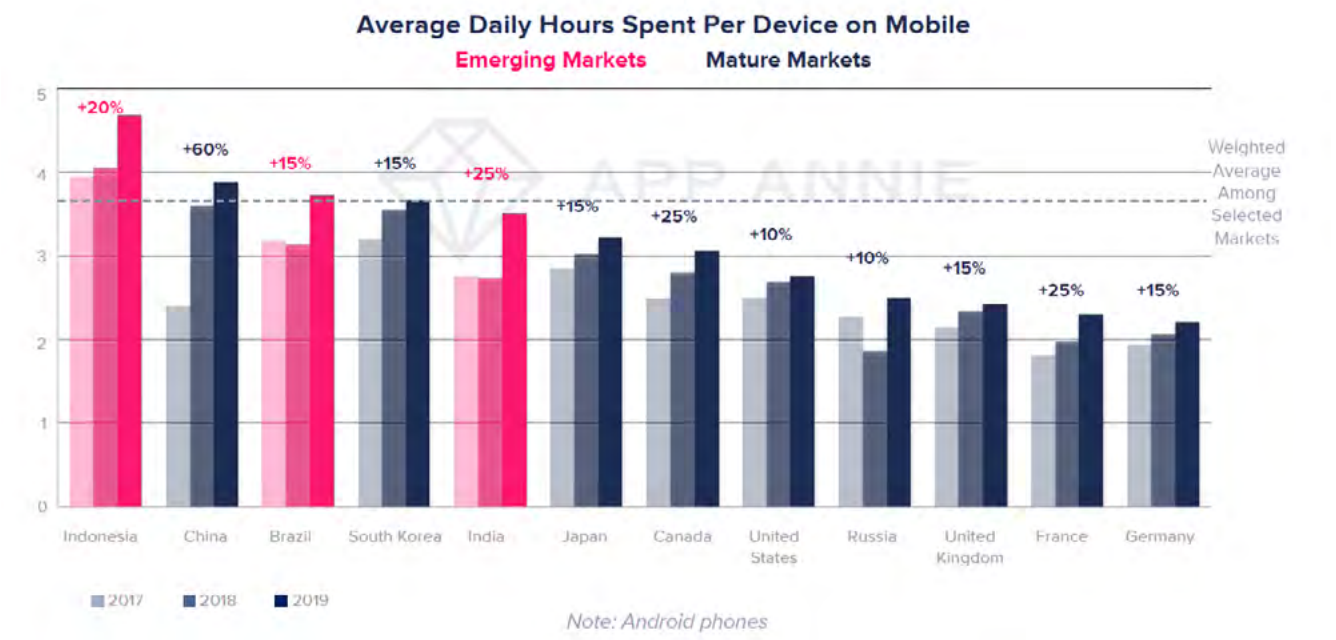
The US and Russia saw the lowest levels of growth at 10% apiece since 2017, though the latter has posted a significantly higher one-year figure after a notable decline in usage time seen in 2018. US average daily usage time comes to around 2 hours 45 minutes.

Broadly speaking, we can say Asian markets spend more daily time using mobile devices than North Americans, who in turn log more daily usage time than Europeans. Brazil is the only Latin American market we have stats for (third place, 3 hours 50 minutes per day – an increase of 15%).

We are limited to Android devices in this analysis. This may have an impact on the results in markets where iOS devices are popular (the US or Japan, for example), though that would depend on the assumption that users of Apple devices use them more or less on average every day.

Across all of the markets analysed by App Annie, daily mobile usage increased by an average of 35% in the period analysed. A weighted global average is around the 3 hours 40 minutes mark – a figure driven up considerably by emerging markets.

Average daily time spent with Android devices by country, 2017 – 2019, hours



Data source: App Annie

App usage by country: H1 2020

Most of the above stats, of course, refer to a pre-coronavirus world. The first half of 2020 saw significant changes to behaviour as lockdown conditions were imposed over many countries around the world.

Hootsuite/We Are Social data, published in July 2020, drawn from a variety of sources, estimates that average daily time spent accessing the internet from mobile devices came to 3 hours 29 minutes. These figures also show that mobile internet users account for 91% of total global internet users (90% being smartphone users).

Focusing on Q2 2020, if we break down total average monthly app usage time by market, we see country level trends that broadly reflect the size of each market's population.The Indian market is the world's largest outside of China, which doesn't seem to feature in this analysis. In this increasingly connected and mobile-first market, users spent a collective average of over 35 billion hours per month using apps in Q2 2020. This is a huge 30% increase since Q4 2019, the last quarter of true global normality. If we compare the increase registered in Q1 2020 (already likely to have been exaggerated) with that three months later, we can see clearly see the effect of the pandemic.

Brazil logged the next highest monthly average, at a little under 15 billion hours, with the US in third a little over 10 billion average monthly hours collectively. Given that these figures broadly reflect population size, as we might expect, it is worth looking at the increases registered to get a sense of the narrative here.

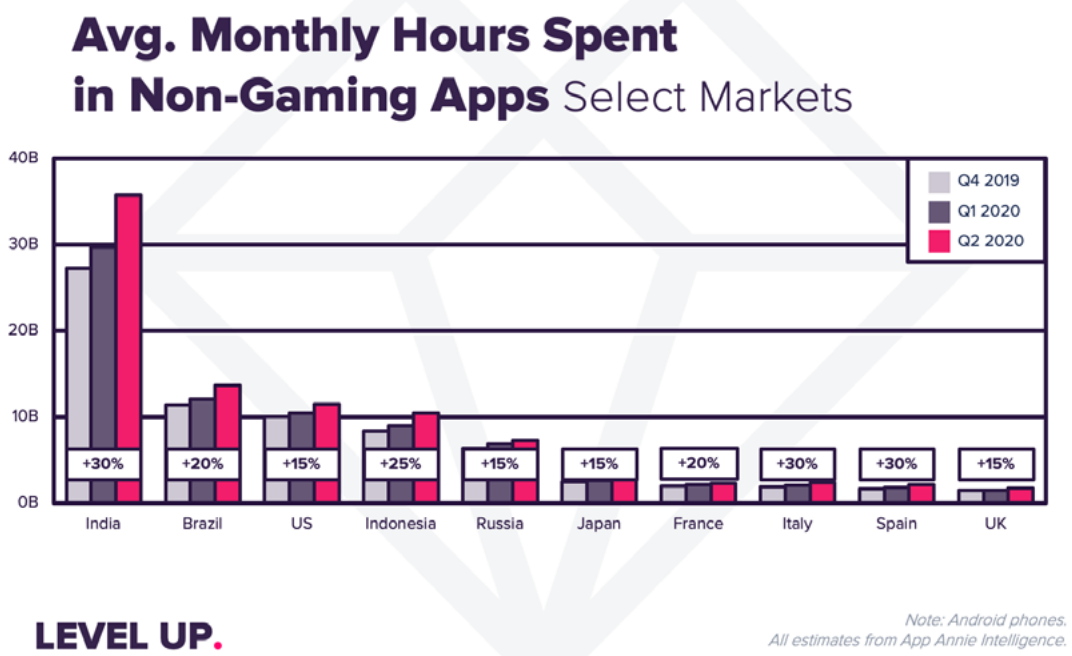
In Asia, emerging, mobile-first markets logged the biggest increases between Q4 2019 and Q2 2020, with India at 30% and Indonesia at 25%. This compares to a mere 15% in Japan. We might note Japan's approach to the lockdown was far less stringent than others, relying more on a sense of civic duty rather than the tighter regulations we saw elsewhere.

Moving to the Americas, we saw solid though relatively unspectacular 20% growth in Brazil, which we might account to the lack of a nationwide lockdown, or an already high base level of usage. The US's 15% figure echoes other instances in this report in which we see slower levels of growth in the app's birthplace. There are various reasons we could put forward for this. An already high base level of usage might be one, in a market where we've certainly seen the effects of saturation in recent years. We might also note that figures are Android only. iOS data might change the paradigm here also.

In Europe, the highest increases of 30% apiece can be found in the markets which were first and initially hardest hit, Spain and Italy. In both, we saw strict lockdown measures imposed, resulting in this upsurge. The UK and France, on the other hand, logged lower increases of 15% and 20% respectively.

In the case of the UK, this reflects stats found elsewhere in this report.

Average monthly time spent with mobile apps by country, Android only, Q2 2020



Data source: App Annie

Another set of App Annie stats look at the proportion of waking hours were spent with mobile devices in the first half of 2020 as compared with 2019, as well as total daily usage hours. These stats are broken down by market, with these separated into three categories depending on at which stage they were affected by the coronavirus pandemic. Regarding the former, the global average in April 2020 was 27%, meaning over one hour in every four was spent with mobile devices. This compares to 20% in 2019. Presuming the average person spends 16 hours awake each day, the increase is equivalent to 1 hour 5 minutes, taking the total to 4 hours 20 minutes.

China was the sole country affected during the first phase of the pandemic. We therefore see a spike in usage time in Q1 2020, with levels then returning to 2019 levels by Q2 2020 as the nation quickly managed to contain the pandemic.

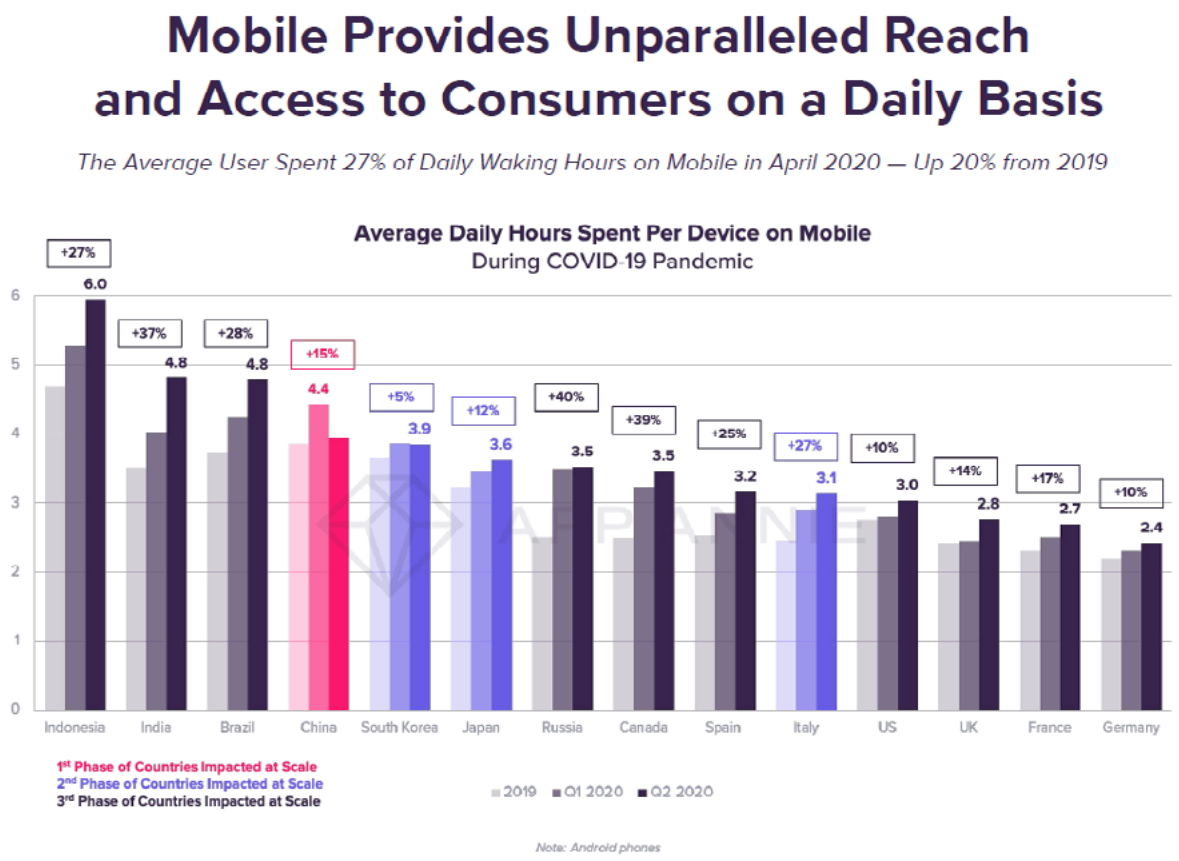
The second wave affected South Korea, Japan, and Italy (of the countries featured here). South Korea already logs fairly high figures for a mature market, so only saw a relatively small increase in Q1. Japan and Italy, on the other hand, saw notable growth in both quarters, with the users in the latter spending 27% more time per day using mobile devices compared to 2019.

Third-phase countries tend to follow the same pattern, with notable increases in average daily mobile time over both quarters. There are some exceptions to this. Usage time grew significantly in Russia over Q1 2020, but then plateaued at that level over the second quarter. In the UK and US, both of which were slower to implement lockdown measures, significant increases were not seen until Q2 2020.

Interestingly, despite being affected later than many nations, and not seeing the implementation of a nationwide lockdown, average mobile time increased over both quarters in Brazil. This suggests that the desire for information as well as for distraction may also have driven growth during these anxiety-inducing months. This may also indicate users taking pre-emptive measures even where lockdown conditions were not necessarily being enforced.

As above, the highest overall figures are logged in emerging markets, with 27% growth in Indonesia taking the daily total to 6 hours. Of these, the largest increases were seen in India (37%, to 4.8 hours) and Russia (40%). Canada also saw considerable growth (39%).

Average daily hours spent using mobile devices, 2019 vs H1 2020, hours



Data source: App Annie

GlobalWebIndex figures published in July 2020 also identified an upswing in time spent with mobile devices during the coronavirus pandemic. We are not given the absolute figure, but we are told that 70% of users from select markets were spending more time with mobile devices.

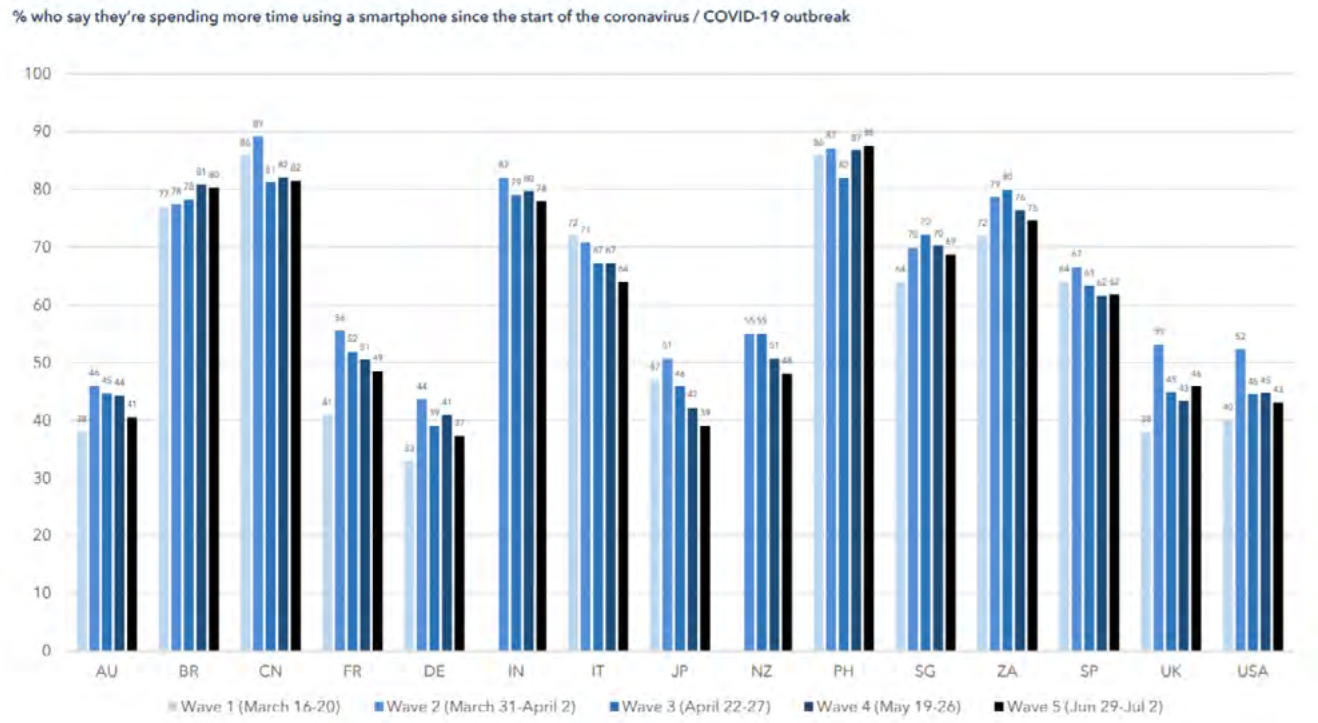
Once again, we see the highest figures reported in mobile-first developing markets: 88% in the Philippines, 80% in Brazil, 78% in India. We also see a figure of 82% reported in China's hybrid market, where mobile apps played a key role in the state's response to the pandemic.

23% of global respondents reported that they were spending more time using tablets.

If we look back at figures reported in prior months, we can see some similar country-by-country patterns to those discussed above. China peaks sooners than most, than goes to a lower level, while the UK and US don't register increases until the second phase measured here (March 31-April 2), for instance.

The hardest hit European markets, outside of the UK, Spain and Italy, both log relatively high increases. Stringent lockdown measures will certainly have played their part in this.

Average daily hours spent using mobile devices, 2019 vs H1 2020, hours



Data source: GlobalWebIndex

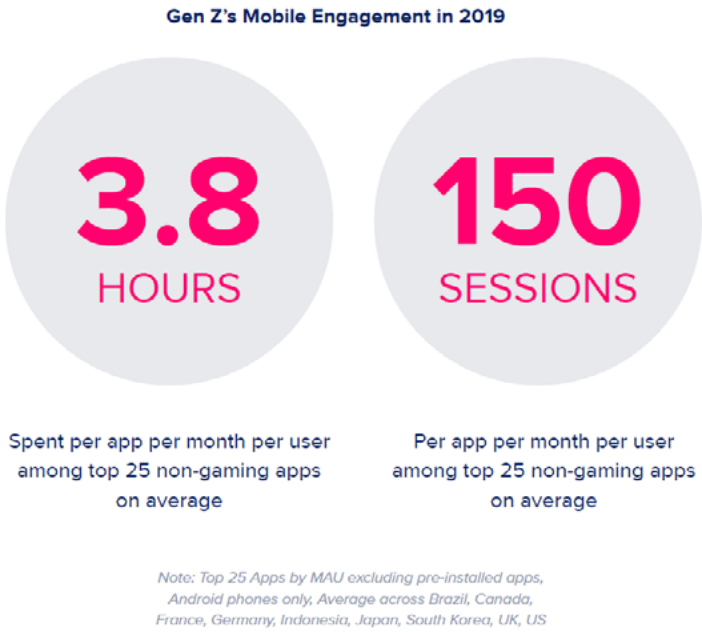
3.3 APP USAGE BY AGE

App Annie app usage stats zoom in on Gen Z – the post-Millennial age group born from 1997-2012. This generation is the first true generation of digital natives, with the younger end of scale younger than the iPhone. A full 98% of those in this age bracket (in select markets) are smartphone owners.

Taking a selected global sample of Android users, we find that these users log 60% more sessions in the top-25 non-gaming apps than other generations. In absolute terms, this comes to an average of 150 sessions per month, per app. Average monthly usage time for each of these 25 apps is 3.8 hours.

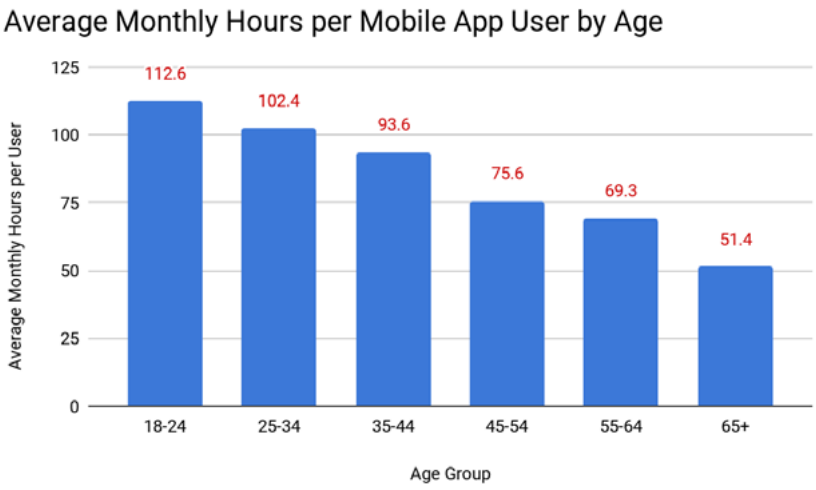
That would give us a total monthly app usage time of 95 hours, for these 25 apps combined.

Gen Z mobile engagement, 2019



Data source: App Annie

Average monthly app usage time by age group, hours



Data source: Simform

Simform stats based on a survey of 3,756 mobile users (presumably US based though this is unclear) confirm that Gen Z users are the most avid app users, logging 112.6 hours per month.

Like other age-group based stats, there is a distinct drop off in usage between younger and older users. What's interesting here is that the most abrupt drop seems to occur between 35-44 and 45-55-year olds.

Yes, Millennial and younger Gen X users do not log as many hours as the youngest age bracket, but the drop off is not as severe as we see elsewhere. A difference of 10 or so hours per month is equal to a mere 20 minutes or so per day.

There is a logic to this. The entire working lives of users in their 30s and 40s will have been supported by technology. While they may not be digital and mobile natives in the same way, those in these age brackets are no strangers to technology in their work or personal lives.

The oldest generations see a distinct drop off, though we might note that until we get the 65+ category, users are still spending over two hours per day using mobile apps.

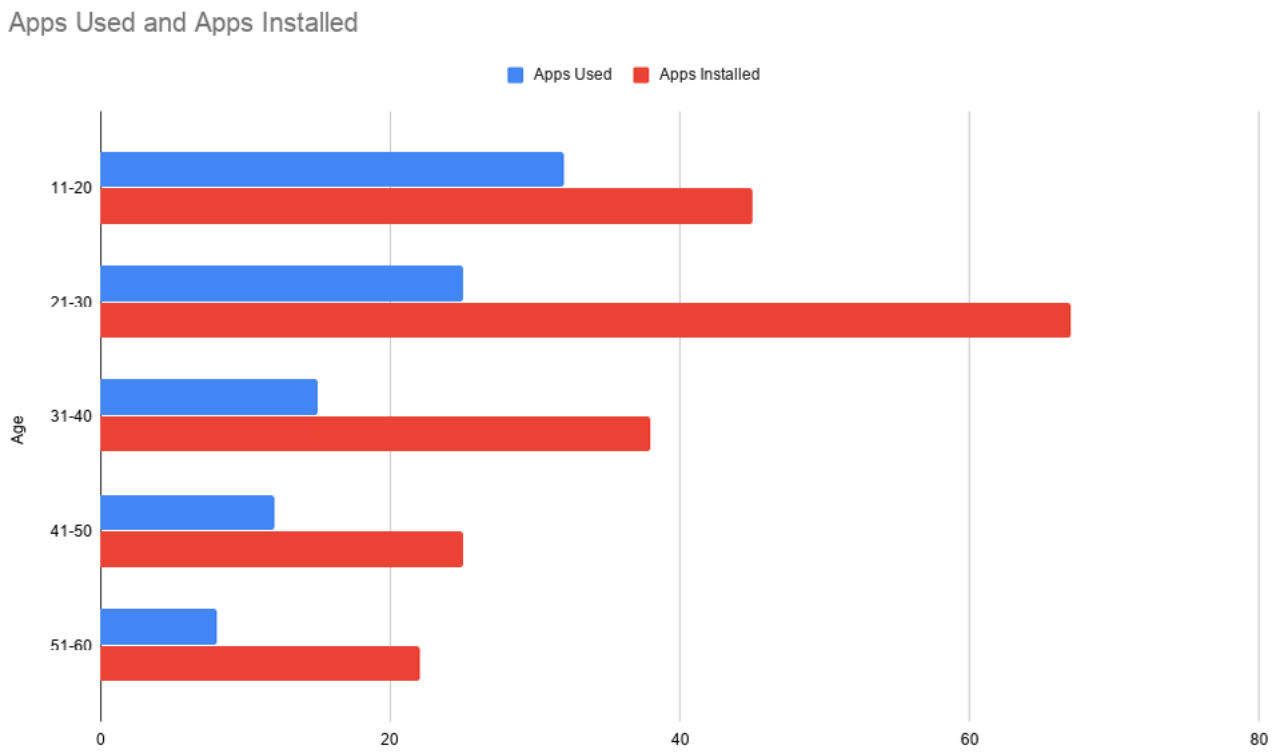
According to more data from app developers Simform, users tend to use a relatively small proportion of the apps they have installed on their devices.

Those aged 21-20 have the greatest number of apps on their devices, with 67 on average. Of these, however, they use only 25.

We can see for older demographics the proportion seems to get even smaller. The youngest 11-20 category of users are the only bracket who use most of the apps they install.

We might note that these young users are also those who use the greatest number of apps on average.

Apps used versus apps installed by age



Data source: Simform

3.4 APP USAGE BY APP TYPE

App usage time by app type

Simform app usage stats (published in September 2020, though the survey period is unclear) break down average app usage time by app category, then compare this against the categories which users said they used they most.

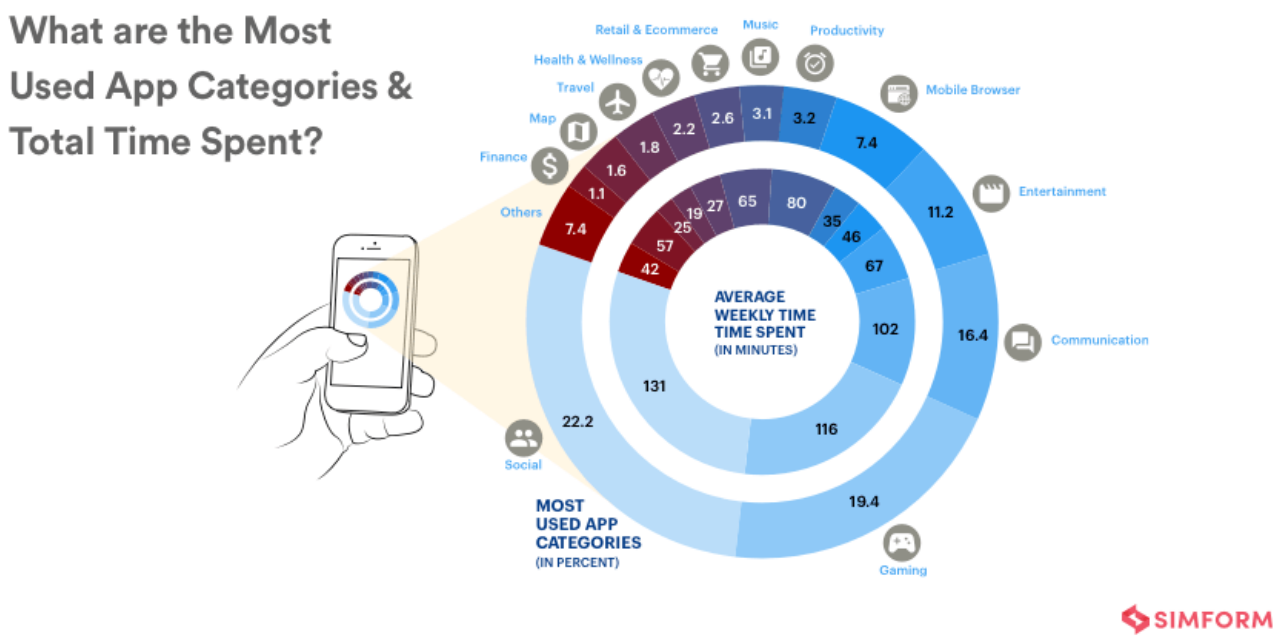
In this analysis, social media comes out top, with users spending an average of 131 minutes per week using these apps. 22.2% of users chose it as their top app category.

Social in this case is separated out from messenger apps, which are used for 102 minutes per week on average, 16.4% choosing it as their top app category. The second biggest category is gaming, however, on 116 minutes weekly, the top category for 19.4% of users.

Entertainment (11.2%, 67 minutes) and mobile browsers (7.4%, 46 minutes) account for the next greatest shares, after which point various smaller app categories account for the remainder.

Simform notes that the lesser elected options tended to be those engaged with on a needs-basis (think maps or travel apps). The top-five categories were used daily by 75% of users.

Most used app categories and average monthly app usage by app type, minutes



Data source: Simform

GlobalWebIndex stats published by Hootsuite/We Are Social in July 2020, but pertaining to Q1 2020, show that the average internet user aged 16-64 would spend 1 hour 31 minutes listening to music streaming services per day, 2 hours 22 minutes using social media, and a total of 6 hours 42 minutes using the internet.

Going back to 2019, App Annie stats look at the total time spent with different app categories. These stats show that social and comms apps account for a half the time we spend globally with apps. This proportion, however, is declining. In 2017 it stood at 56% and in 2018, at 53%.

This is perhaps a reflection of the more diverse roles apps have to come to play in our lives. While staying in touch and communicating with each other remains the central purpose of our mobile devices, it has gradually begun to give way to more complex and diverse functions.

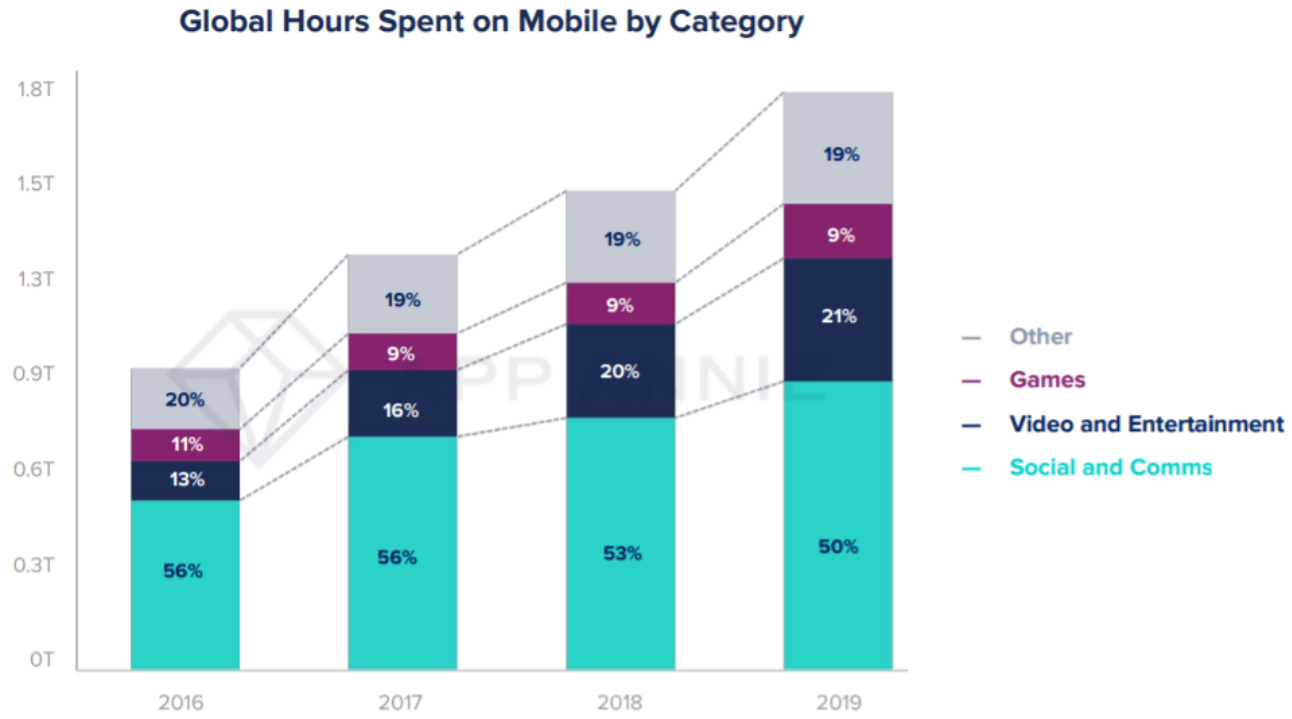
We've also seen a small decline in games usage in the four-year span analysed here, though it levels off in later

years. High levels of mobile gaming have traditionally been considered the preserve of younger markets, trailing off as they reach maturity. We might read this decline as a symptom of that. This, however, we must contrast with the increasing legitimacy of mobile forms of gaming.

The app category that has grown the most is video and entertainment, rising from 13% in 2016 to 21% in 2019. This confirms the shift towards the small screen for our entertainment needs that has occurred over recent years. Increasingly mobile devices are used to pass the time well as well as simply staying in touch with others.

These stats are for Android phones, though exclude China.

App usage time by category, 2016 – 2019



Data source: App Annie

Global penetration of app activities

GlobalWebIndex stats cited by Hootsuite/We Are Social and pertaining to Q1 2020 measured how many internet users aged 16-64 across the world engaged in certain online activities.

Leading the way among these was the viewing of online videos, an activity in which a huge 90% of the online world engaged. As the enduring popularity of YouTube evidences, there is perhaps nothing in the world closer to a universal language than short video clips that can be easily digested on a mobile device. It is also worth adding that YouTube is the world's most popular music streaming service...

Music streaming through dedicated apps is the next most prevalent activity, with 72% of users across the world utilising such services. Certainly, the unprecedented access we have to pretty much the entire Western canon of music, and much beyond that, has changed the face of music listening forever.

This figure shows how readily users across the world (music being another universal language) have embraced this freedom from the constraints of physical media. It also shows the scale of the challenge faced by the music industry, and the threat of a global flattening of listening habits.

The popularity of online radio stations, on the other hand, show that some forms of traditional music listening – chiefly curation – are still popular. In total, 48% of global internet users listen to these digital updates of traditional media.

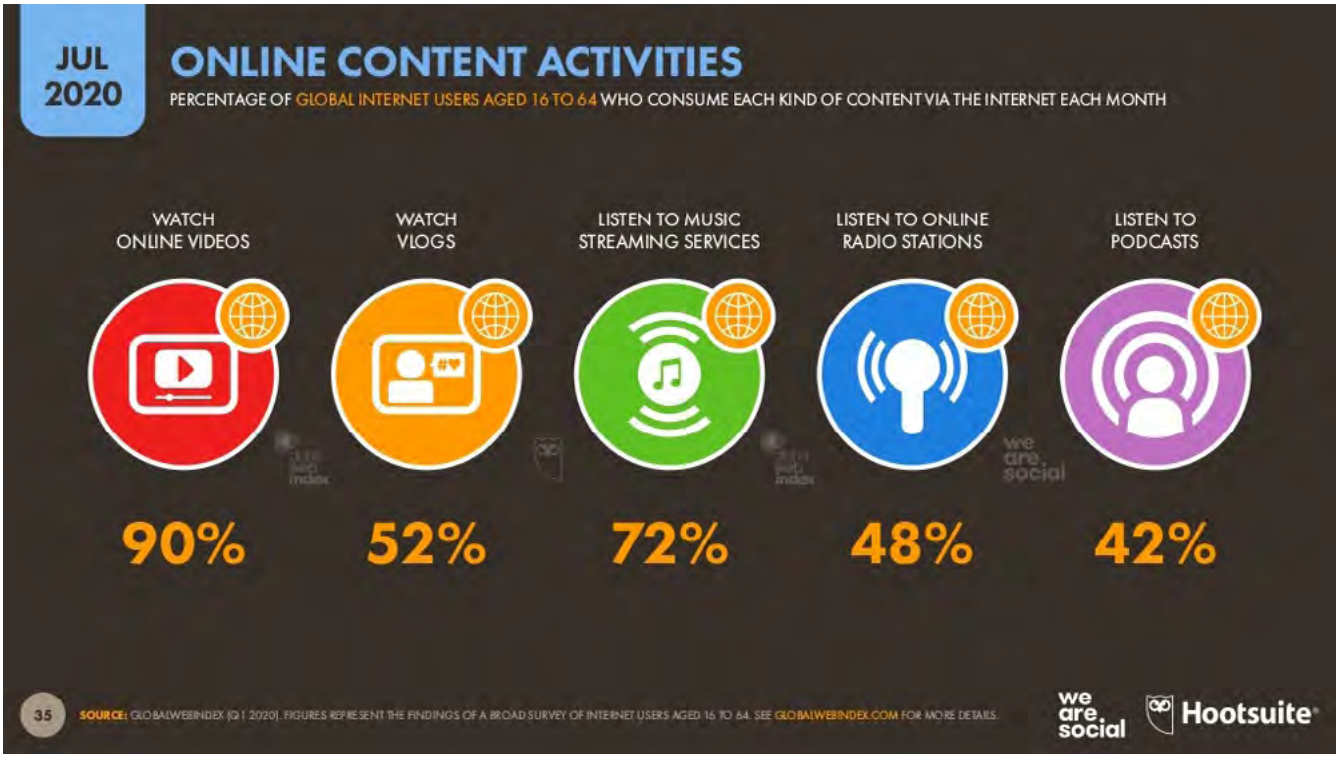
Radio stations do not just broadcast music of course; they also broadcast news, entertainment, and other

content formats. We find the same variety among podcasts, to which 42% of internet users listen. That Spotify, the biggest name of music streaming, has embraced a podcast-focused strategy shows just how popular this content format has become.

Finally, we learn that more than 52% of global internet users watch vlogs. This perhaps is a reflection of the rise of the influencer. This content format is perfectly suited to this new type of internet celebrity – a way through which they can create intimate, regular content through which they can directly engage their fanbase. This can cater for those interested in any topic, from gaming, to beauty, to sports, to politics, and more.

That over half of internet users across the world engage with this content format reveals just how significant vlogs are. Brands are certainly aware of this, with influencer marketing (though this takes place over many other content formats too), becoming a whole increasingly-formalised industry of its own.

Online activities, Q1 2020



Data source: GlobalWebIndex via Hootsuite/We Are Social

3.5 APP USAGE: DURING AND AFTER CORONAVIRUS

Increased usage of app types/activities during coronavirus

Moving forward, the aforementioned July 2020 GlobalWebIndex survey showed that respondents believed that they were spending more time engaging in various app-related activities during the lockdown months.

The largest proportion of respondents (56%) reported that they were using online learning platforms with their children more. This may be born of necessity, but it shows how apps have played an essential role in helping us navigate the practical challenges of the coronavirus pandemic.

The next largest proportion were spending more time using streaming services like Netflix (54%) and video services such as YouTube (51%); followed by messaging services (42%) and social media (43%); and then music streaming apps (37%).

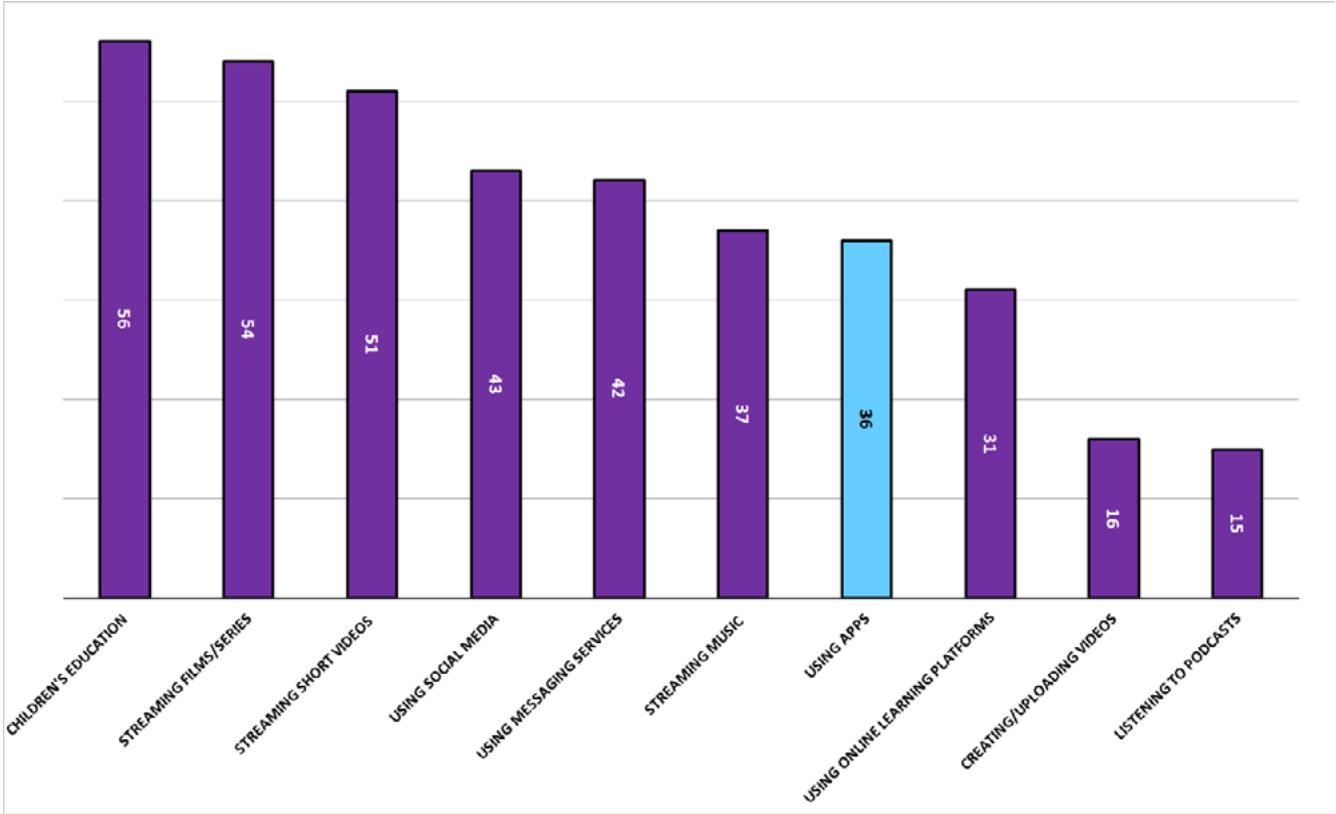
Slightly smaller proportions reported they were spending more time using online learning platforms for themselves (31%), listening to podcasts (15%), or on esports (12% – it's unclear whether this refers to watching or playing them).

35% of respondents reported spending more time playing computer/video games, though would seem to include console as well as mobile gaming. A relatively small proportion (16%) reported upping the amount of time they spent creating/uploading videos.

This wide range of activities reflects the diverse roles app have to come to play in our lives, covering everything from entertainment, to education, to communication. The lockdown served to throw these app-facilitated activities into sharp relief.

Overall, 36% reported spending more time using apps.

Percentage of users reporting increased app usage for select activities, July 2020



Data source: GlobalWebIndex

Again, we see variation between markets, with emerging markets seeing bigger increases in these activities than advanced economies.

In India (31%), Brazil (24%), and the Philippines (24%) we saw a more significant proportion of users reporting that they were creating and uploading more videos, for instance, against the global average of 16%. This seems to apply across the board, with these markets seeming to engage more with each of the activities considered in this analysis.

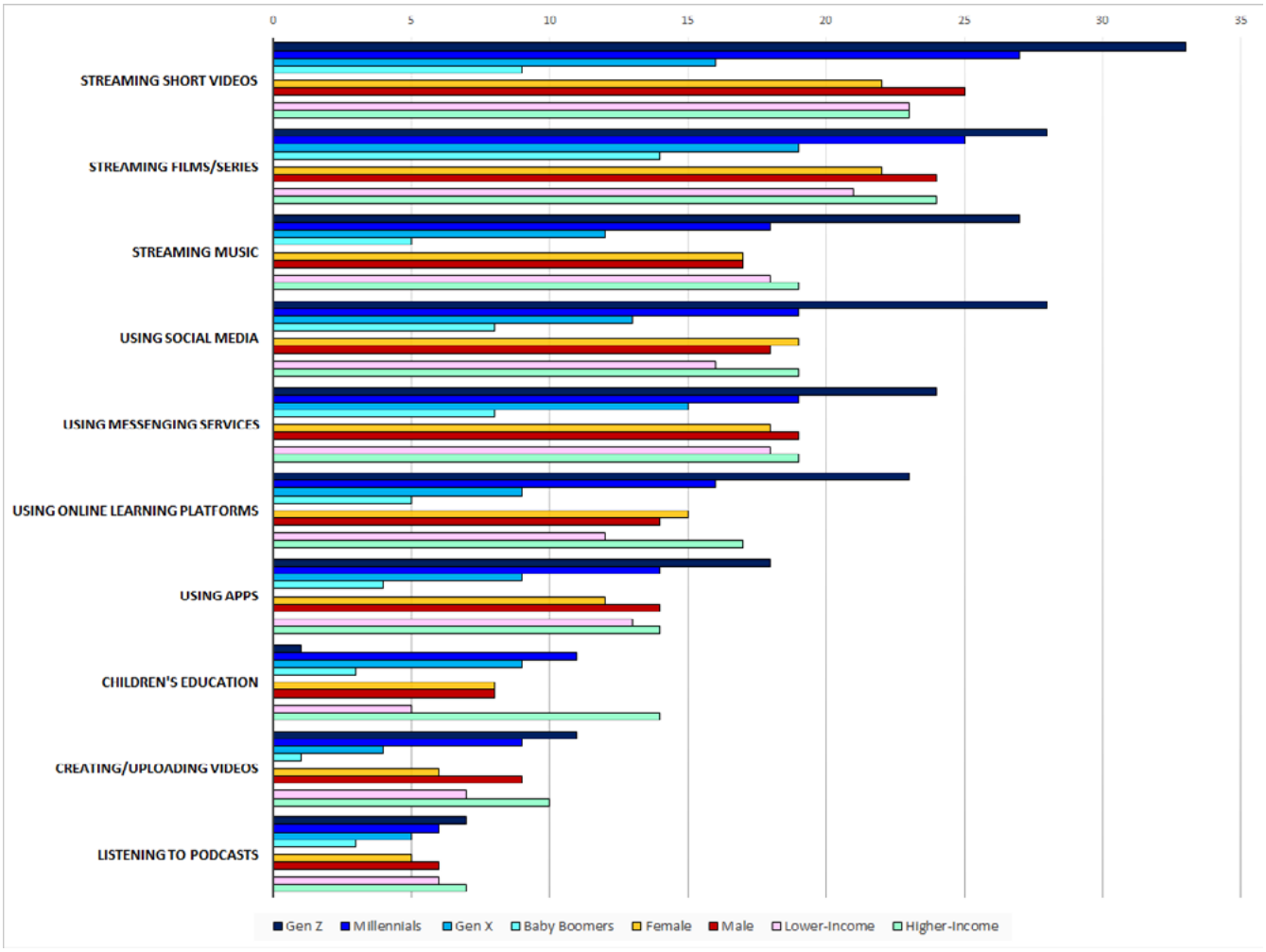
We see some variation among advanced economies. Italy (48%) and Spain (47%) see a far higher percentage of respondents reporting that they were spending more time with messaging apps than the US, where a mere 12% reported doing so. In Japan, 17% users reported spending more time with Netflix-like streaming services, compared to 51% in the UK and 56% in Canada.

Indeed, only small proportions of Japanese users report increases in any app-related activity. This reflects the relatively relaxed lockdown in the country, as well as the continued prominence of traditional broadcast media. Here, we see the greatest proportion out of any market (48%) reporting spending more time with broadcast channels. Streaming services have traditionally found it a hard market to crack.

Canada, on the other hand, ranks alongside Spain and Italy for perceived increases app usage. Indeed, its figure of 41% spending more time using apps is higher than both the global average and the figure reported from Brazil (39%). Canada's immediate neighbour to the south, however, consistently logs among the smallest figures in any metric.

We get a rare snapshot here of behaviour in some Eastern European economies beyond Russia also. In this analysis, they tend to post figures that lie somewhere in-between other European nations and the various Asian/ Latin American markets.

Percentage of users expecting to continue increased app usage for select activities by demographic, July 2020



Data source: GlobalWebIndex

We see 44% of respondents in Romania and 45% in Poland, saying they are spending more time with social media, for instance, or 47% and 44% respectively spending more time with short video apps.

Outside of India (49%), the market that saw the greatest proportion of people reporting that they were spending more time with apps was South Africa (44%), followed by Singapore (39%). As well as variations between different countries, there are also clear demographic differences that reflect certain truths about app usage during the pandemic. As we might expect, the greatest prevalence of increased app usage is reported among Gen Z users. Certainly, this would confirm for anyone who still harboured any doubts that developers must shift their attention towards the generation born after 1996.

There is a clear downward trend as we progress up in age groups, with each representing a significant step downwards. Let's take social media for example. 59% of Gen Z reported increased social media usage during the pandemic. This compares to 44% of Millennials, 36% of Gen X, and 26% of Baby Boomers.

The differences are, of course, more pronounced in certain metrics. For example, the proportion of Baby Boomers who reported increased usage of film/series streaming apps (32%) was half of the proportion of Gen Z users who did so (65%). When it comes to music streaming, however, this drops to around a quarter (13% to 53%). Older generations have clearly more readily embraced certain app categories than others.

Another interestingly generational trend is how clearly defined the difference between Millennials and Gen Z users is, by and large as wide as the difference between Millennials and Gen X. This is perhaps a reflection of Gen Z's status as the first true generation of digital natives, as well as a reflection of the reality that they are likely to enjoy greater leisure time than a generation now mostly in its 30s.

As we might expect, the one area in which Gen Z (the oldest members of which began to turn 24 in 2020) has less readily embraced apps is educating children. Millennials and Gen X (roughly aged 27-55) report turning more to such apps in the greatest numbers (24% and 25%).

There are no truly edifying differences between male and female users.

There's a clearer distinction between users from different income brackets, more pronounced for some app types than other. The most striking difference is seen in using education apps with children. Here we saw 30% of higher-income respondents reporting higher usage, compared to 11% of lower-income.

Other app categories in which higher-income users reported a greater increase in app usage were film/series streaming (57% to 43%), music streaming (41% to 33%), social media (46% to 38%), and messenger apps (44% to 36%).

Other categories seem less affected by income bracket. Video streaming (50% to 47%) and overall app usage (37% to 35%), for example.

We might note that this international analysis. We might see more striking differences between users in different income brackets at a national level.

3.6 OTHER APP USAGE STATS

Mobile data usage by app category

According to Ericsson data, a total average of 46.2 exabytes worth of mobile data came through the world's mobile phones per month in Q1 2020 (an exabyte is equal to 1 billion GB). This gives us an average of 8.4 GB per smartphone.

The former figure naturally represents a slight jump over the previous steady rate of increase, given Q1 2020 would have seen the lockdown begin to bite across the world. Q2 2020 will have seen an even bigger leap, with a steadying effect in Q3 if the other data in this report is anything by which to go.

By way of comparison, Q3 and Q4 2019 saw respective figures of 36.5 and 39.6 exabytes respectively.

On what is this data used? There is a clear answer: mostly video streaming. This is the activity which claims by far the greatest share of mobile data, a whopping 66%. That's 30.5 exabytes worth. Ericsson predict this proportion is going to grow over the next few years, as high as 76% by 2025 (of total global data usage of 164 exabytes).

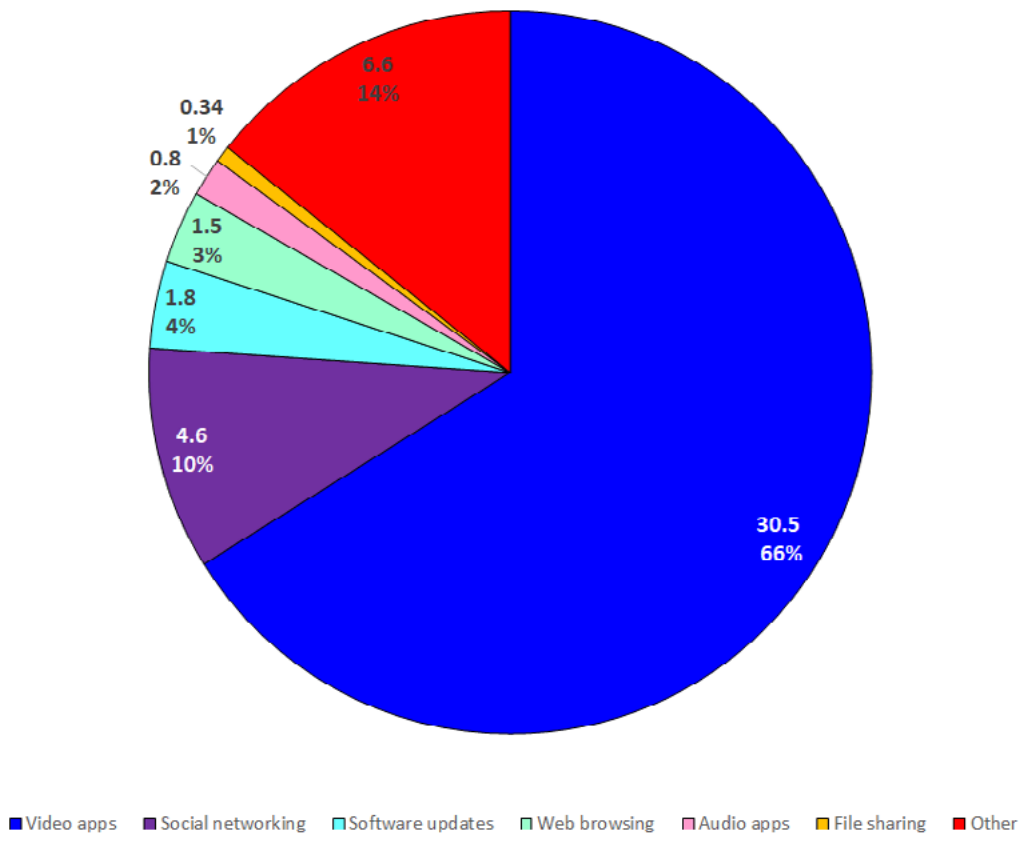
Social networking claims the next biggest share, at 10% (4.6 exabytes), followed by software updates at 3.9% (1.8 exabytes). The latter figure represents both one of the key strengths of apps, that they can be constantly updated, but also the considerable data drain undergone consequently.

Simple web browsing accounts for nearly as much, with 3.2% (1.5 exabytes) taken up with this activity, though interestingly music streaming only accounts for half as much mobile data at 1.7% (0.8 exabytes). Certainly, however, much music and video streaming takes place over browsers.

The last other significant data draining activity is file sharing, on which activity 0.7% of mobile data is expended (0.3 exabytes).

Other app activities account for the remaining 14.3%, or 6.6 exabytes.

Global data usage by app category, exabytes



Data source: Ericsson via Hootsuite/We Are Social

App usage contexts

Simform asked app users in what everyday contexts they use apps. We find that high proportions of users are using apps in each of these, with none of the contexts specified logging a figure of under 62%.

Unsurprisingly the context in which most users said they used apps was 'at home', in which broad context we found 91% of users used apps. The next context is perhaps more edifying, shining a light on an (understandably) less-discussed truth: that 83% of survey respondents admitted to using their phone in the bathroom.

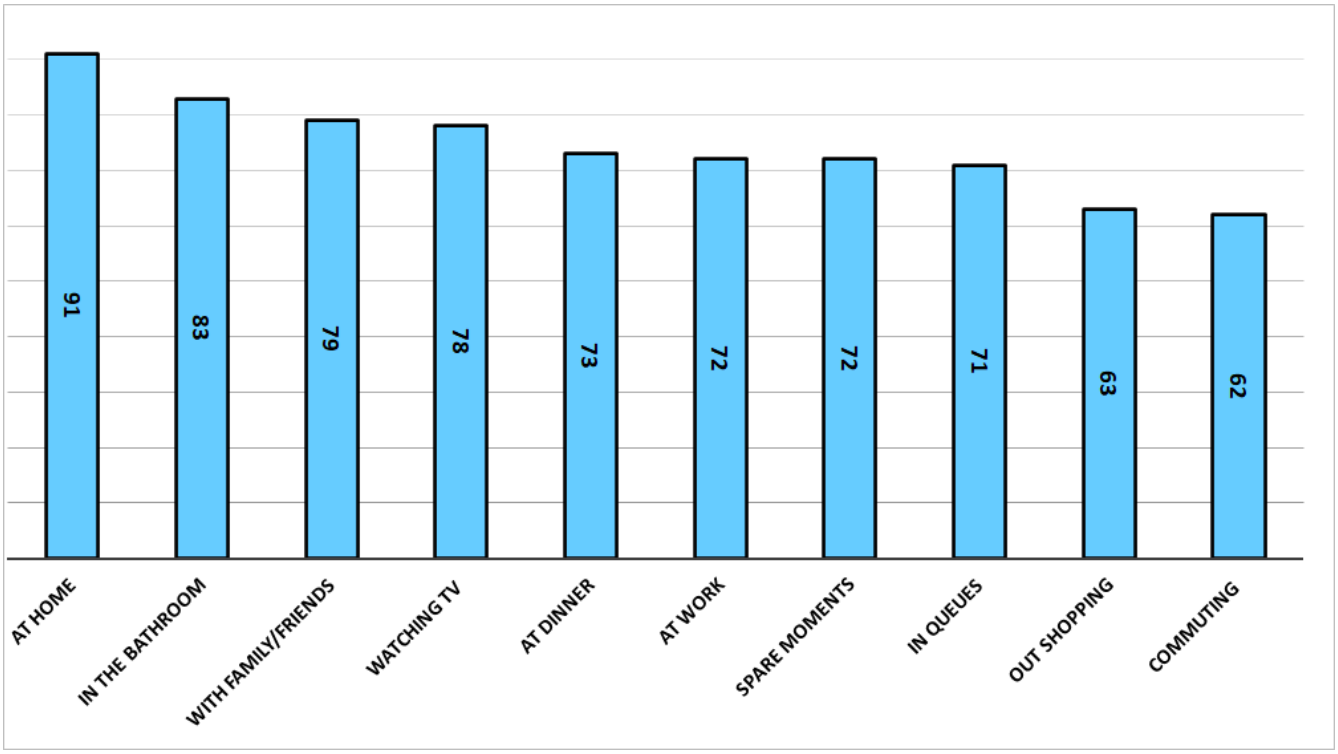
What we can take away from this fact isn't entirely clear, but nonetheless, the fact remains: the vast majority of people use their phone in this deeply personal context.

Looking further down this list of contexts in which users use apps, we see that they are rarely not using them. Being with family and friends (79%) or at the dinner table (73%) are no longer considered to be too sacred to be on our phones (this survey would seem to be in a US context, one wonders if we'd see the same results in a French or Japanese survey).

We also see users using apps when engaged with other media, with 78% combining app usage with the television.

Otherwise we see users turning to apps for momentary distraction: in spare moments (72%), waiting in queues (71%), or even for a brief respite while at work (72%).

Percentage of users who use apps in certain contexts



Data source: Simform

Operating system

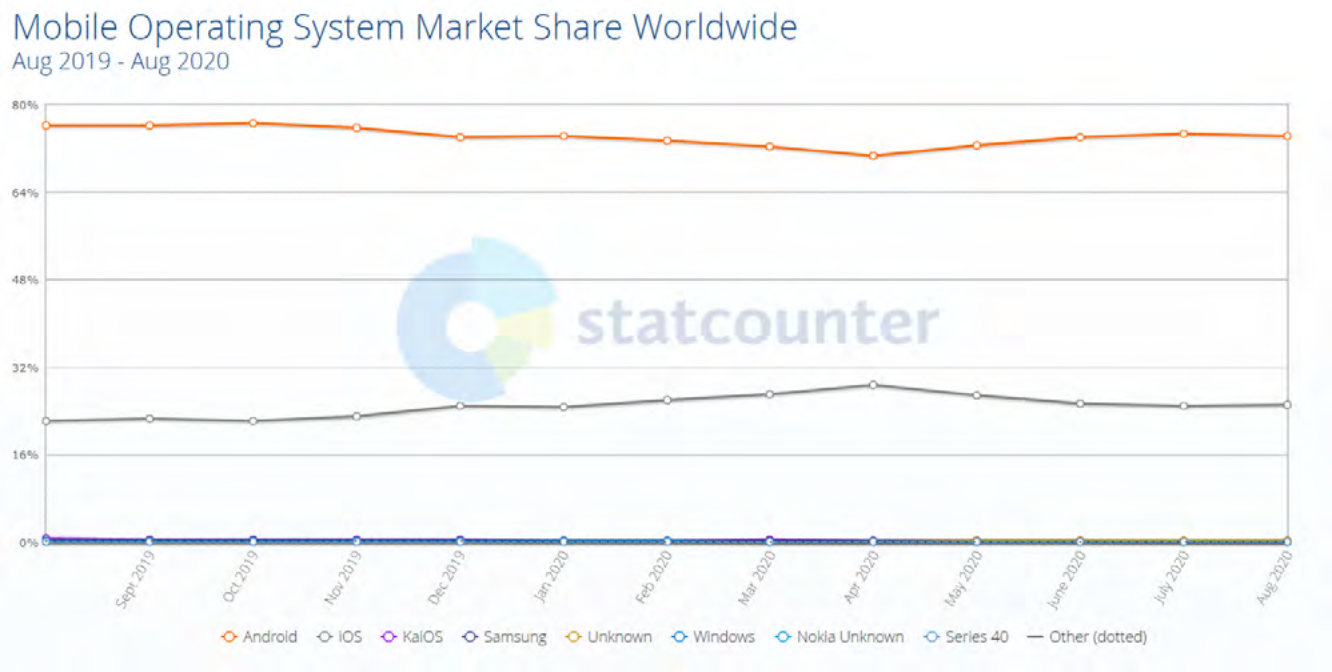
As of August 2020, Android devices accounted for 74.25% of the global total, and iOS for 25.15%. Of alternative platforms to the big two, Samsung makes up the greatest share of 0.23%.

Year-on-year, we have seen a very slight erosion of Google's market share, with August 2019 seeing Android phones accounting for 76.23%. The peak month for Android phones in this one-year range came in October 2019, when they accounted for 76.67% of devices. iOS devices' share fell to 22.09% in this month.

The most dramatic shift was in the other direction, however, in April 2020. Here we saw a clear shift towards iOS devices, the market share of which increased to 28.79%, with Android dropping to 70.68%.

It is unclear why we saw this upsurge in iOS usage during this month, perhaps it may be have been related to users getting new devices during the lockdown. This was very much a short peak, however, with levels in the months following returning the status quo.

Operating system market share, August 2019 – August 2020



Data source: StatsCounter

3.7 MOBILE GAMES USAGE

Going back to Q1 2020, GlobalWebIndex stats referenced by Hootsuite/We Are Social indicate that 72% of internet users aged 16-64 used a smartphone to play games, with 19% using a tablet device. For reference, the total number of internet users was pegged at 4.57 billion, as of July 2020.

We should perhaps qualify this by pointing out that GlobalWebIndex stats tend to reference select markets, with a bias towards advanced markets, and emerging markets with high levels of mobile usage.

Nevertheless, this is certainly an indication of how deep penetration of mobile gaming goes. With 84% of respondents playing games on any device, mobile gaming is the clearly dominant format. 72%, however, doesn't just make it dominant among games platforms. That figure reflects the incredible breadth of the appeal of mobile games, no longer consigned to a gaming subculture, but engaged with on a nearly universal basis in the markets in question.

These are not the only stats that indicate the huge scale of mobile gaming. Newzoo stats dating from June 2020 predict there will be 2.7 billion gamers around the world before the end of the year, 2.5 billion of whom will play on mobile devices. Compared against the stats for total internet users referenced above, this would give us penetration of 55%. Mobile gamers would also account for 93% of total gamers.

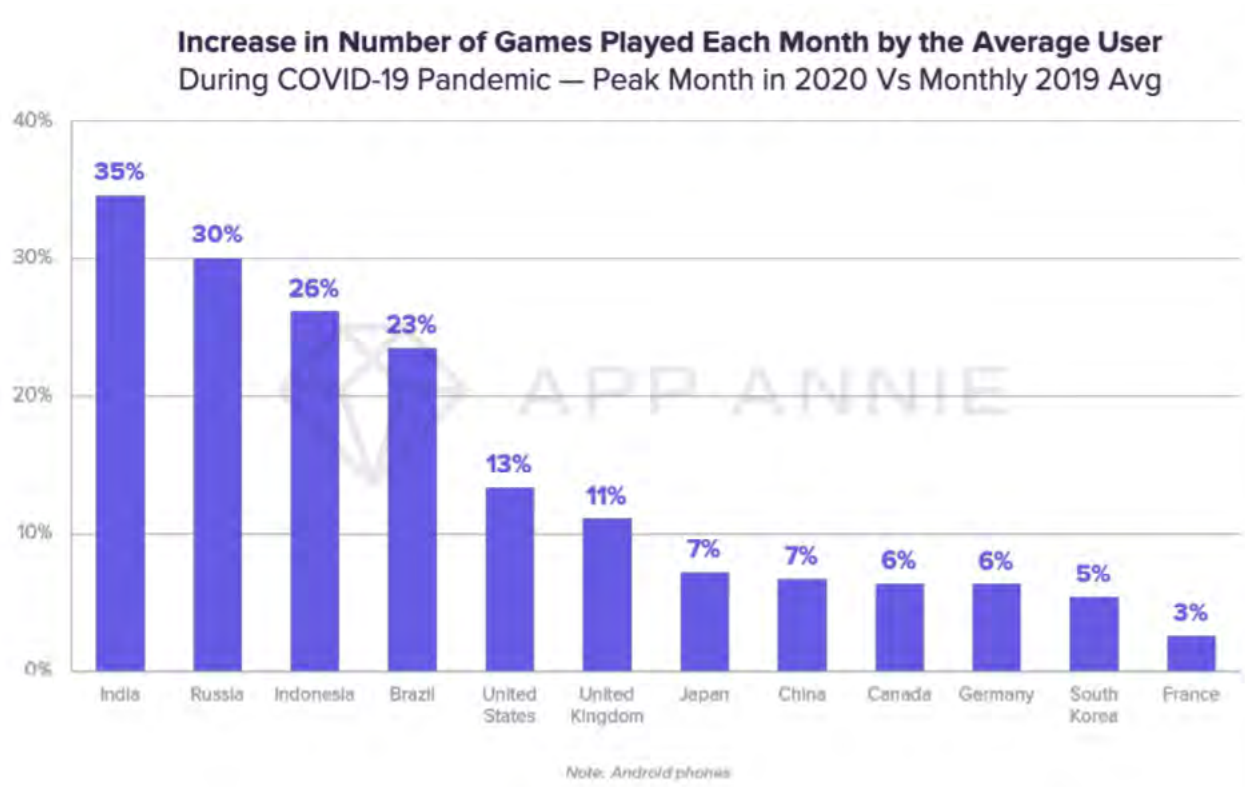
As we've seen numerous indications of above, the months of lockdown saw users turn to mobile games in unprecedented numbers that certainly make these figures seem more than plausible.

App Annie compares the number of games played monthly during the lockdown peak against 2019 in various markets. Here, we can see the scale and diversity of titles being accessed by users across the world.

Once again, its emerging markets that lead the way. Indian users logged the biggest increase (35%), followed by Russia (30%), and Indonesia (26%). The increase seen here would certainly go some way to explaining the significant increase in daily time spent with mobile devices we saw above.

Of advanced markets, the US (13%) and the UK (11%) saw the biggest increase by this measure.

Increase in mobile gaming apps played, peak month vs 2019



Data source: App Annie

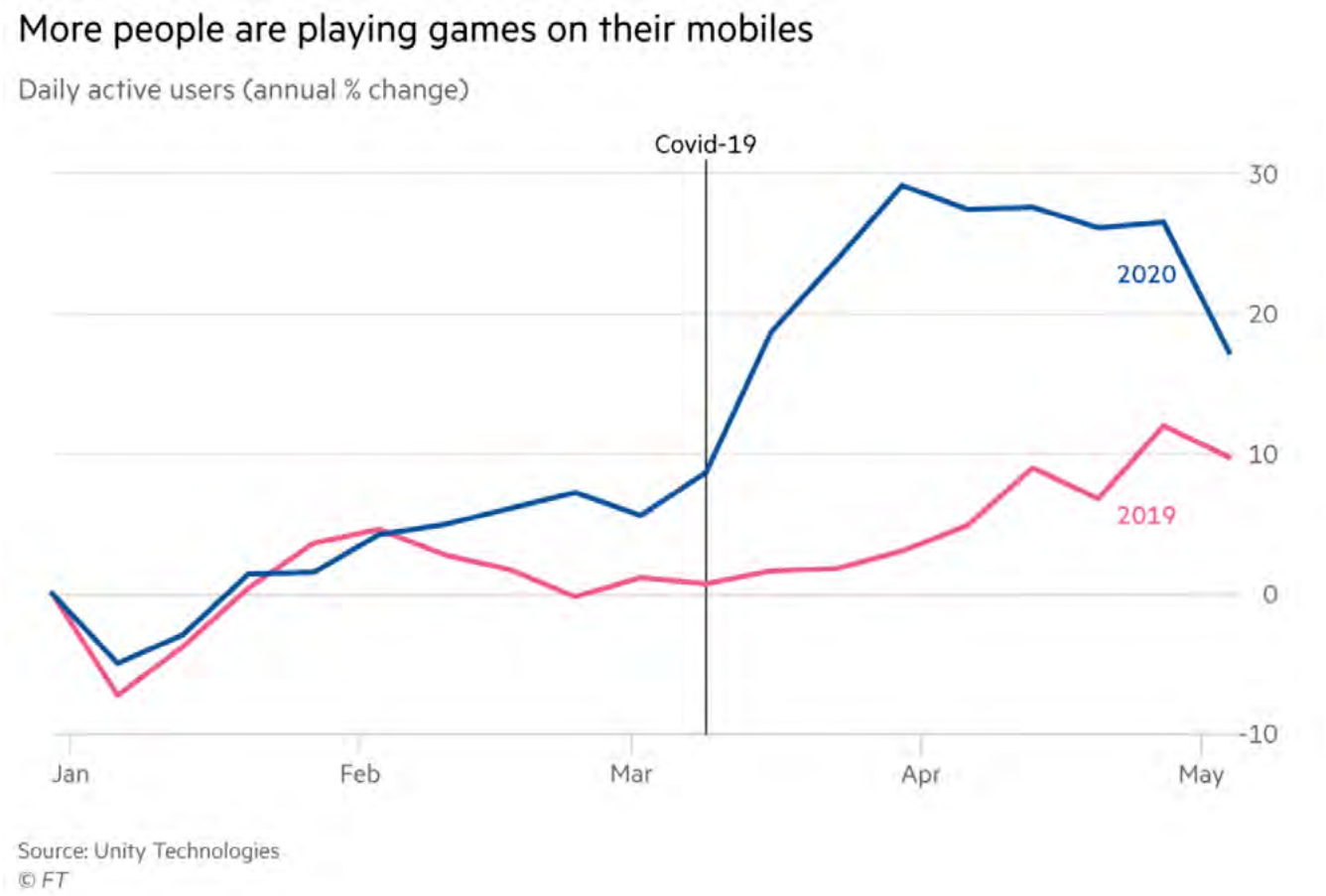
The below stats from the Financial Times map the increase in mobile game DAUs in 2020 vs the previous years. As we can see, the first couple of months of the year saw a pattern closely in line with the previous year.

The dividing line of COVID-19, clearly put paid to that, with the annual increase coming close to 30% in April 2020.

By the beginning of May, however, this had dropped to 20%, with an indication the pattern was returning to a less exaggerated level. It's worth noting that a year prior, we were still looking at a 10% year-on-year increase in DAUs, showing that this phenomenon is not driven by coronavirus alone.

That is not to say we should underestimate just how much coronavirus has changed the mobile game landscape, however.

Increase in mobile game DAUs, 2019 vs 2020



Data source: Financial Times

App Annie's State of Mobile 2020 contains stats looking back over the full year of 2019 concerning the usage time of mobile games by category.

While games download stats are dominated by casual games (82% of downloads), it's a very different story when it comes to usage. Here, we see that core games account for 55% of play time, with casual games for 44%.

This is likely to be an effect of the nature of these games, suggested by their names. Casual games are more likely to be played by users looking for a few moments' distraction – maybe on a commute, an ad break, or other such spare moment between other activities (including waiting for console games to load).

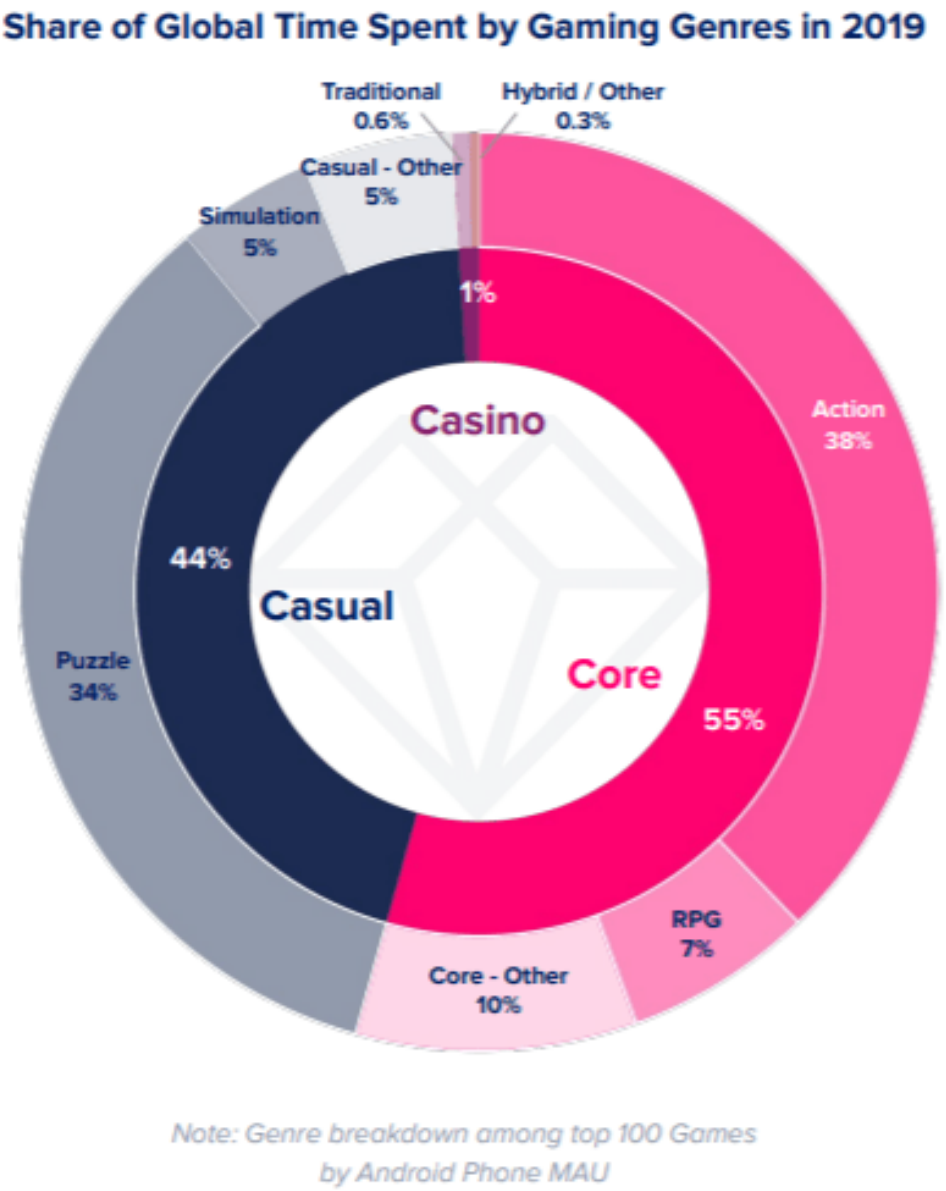
Core games, on the other hand, are the activity to which core gamers dedicate their time. Therefore we see core games accounting for a greater share of game usage time. A third category also features here, not prominent in the download stats: casino games.

This would suggest that while players of these games account for a small proportion of gamers, they are serious users. It also would seem to suggest that these gamers tend to stick with favoured games, rather than regularly downloading new ones.

It will be interesting to see how this paradigm changes over 2020. With the commute looking like a thing of the past, it would not be inconceivable to see casual games lose further share here. And exacerbating this trend, users are likely to have more free time to dedicate to the relative intricacies of core games.

These stats pertain to Android games only.

IMobile games usage time by category, 2019



Data source: App Annie

3.8 SOCIAL MEDIA USAGE

Stats published by Hootsuite/We Are Social peg the total number of social media users in the world at 3.96 billion, 3.91 billion of whom (99%) access social media using mobile devices.

This gives us total global social media penetration of 51%, meaning we could actually find most people in the world somewhere on social media if these stats are accurate. This rises to 65% if we just look at those aged 13+.

According to GlobalWebIndex stats referenced by the same source, average social media usage time per day stands at 2 hours 22 minutes. These stats refer to Q1 2020, so we might presume this figure increased over the lockdown-coloured second quarter of the year. 99% of internet users, aged (aged 16-64) had engaged with a social network or messaging site during the previous month at the time of this survey. This was not simply passive; 88% reported that they had engaged or contributed to social media in the same period.

Usage is spread out over a number of apps, with the average user in possession of no fewer than 8.8 different social media accounts. This ranges from 7.3 average accounts in North America and 7.5 in Europe to 9.3 in Asia Pacific and 9.7 in Latin America. The highest figure of any country is India, where the average user has no fewer than 11.5 different social media accounts. Social media is not just used to stay in touch with friends and family. Not far off half of the users surveyed (40%) claimed that they used social media for work purposes,

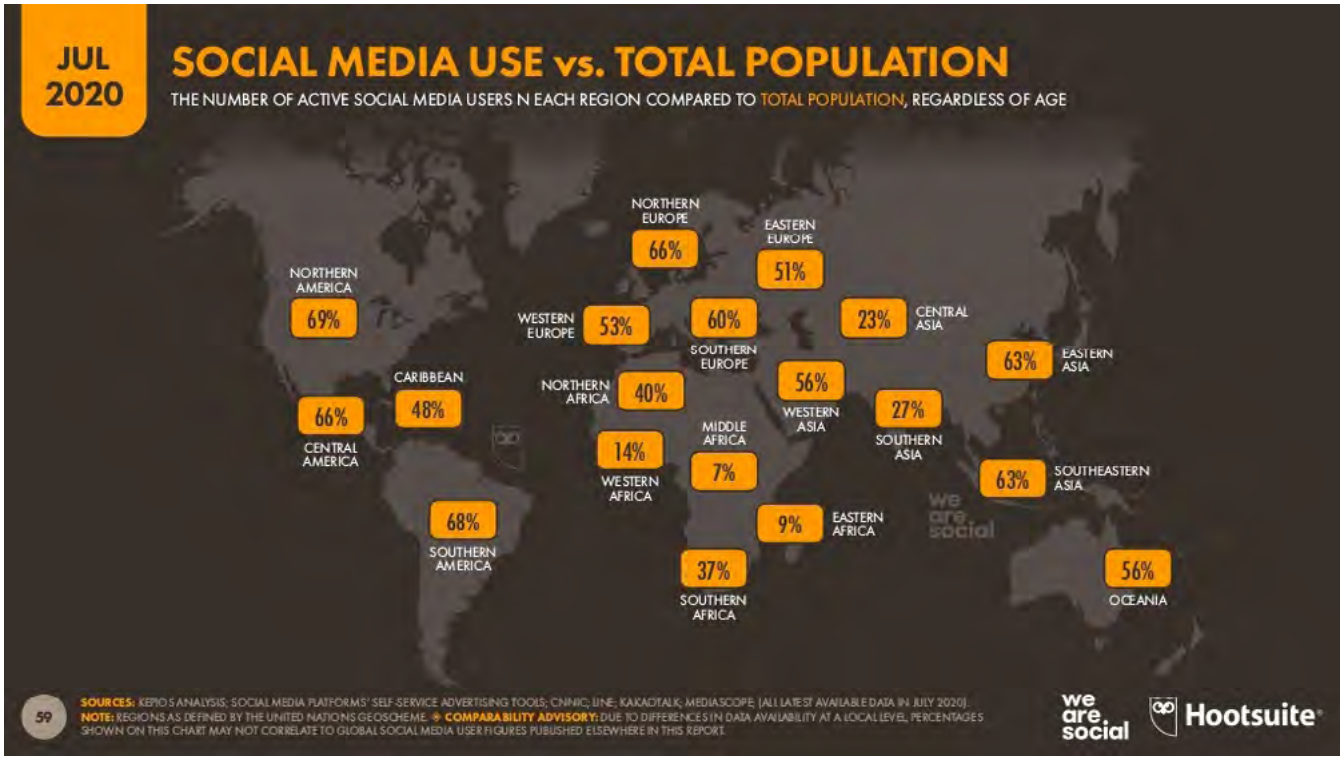
Social media usage by demographic

Naturally, there are variations in social media usage across regions.

Limiting ourselves to those above the age of 13, we find the highest levels of social media usage in the Americas: 82% in the US and Canada, 84% in southern America (not South, so presumably excluding the Caribbean nations to the north of the continent), and 86% in Central America, which in this analysis would seem to include Mexico.

In Europe, the northern (78%) and southern (68%) part of the continent register the highest levels of penetration, while in Asia, southeastern Asia's 81% social media penetration leads eastern Asia's 74%. Oceania, on 71% is not far behind. The lowest levels of penetration, as we might expect, are to be found in the still developing economies of central (12%), western (23%), and eastern Africa (14%). Southern (49%) and northern Africa (57%) log significantly higher figures, however.

Social media penetration by region



Data source: Hootsuite/We Are Social

The Hootsuite/We Are Social stats break down social media usage by age and gender.

Here we see a familiar story, with younger users spending more time using social media than older users.

Average daily time spent goes down fairly neatly as we climb through the age groups. The youngest users, aged 16-24 year olds, naturally conduct a good deal of their lives online – and presumably have done as long as they remember. These users spend an average of 2 hours 53 minutes per day using social media according to this analysis.

There's a pronounced gender divide among these younger users, with female users spending 35 minutes per day more than their male counterparts. Indeed, this skews the overall figure somewhat, with male users aged 16-24 not using social media for much longer per day than 25-34-year olds.

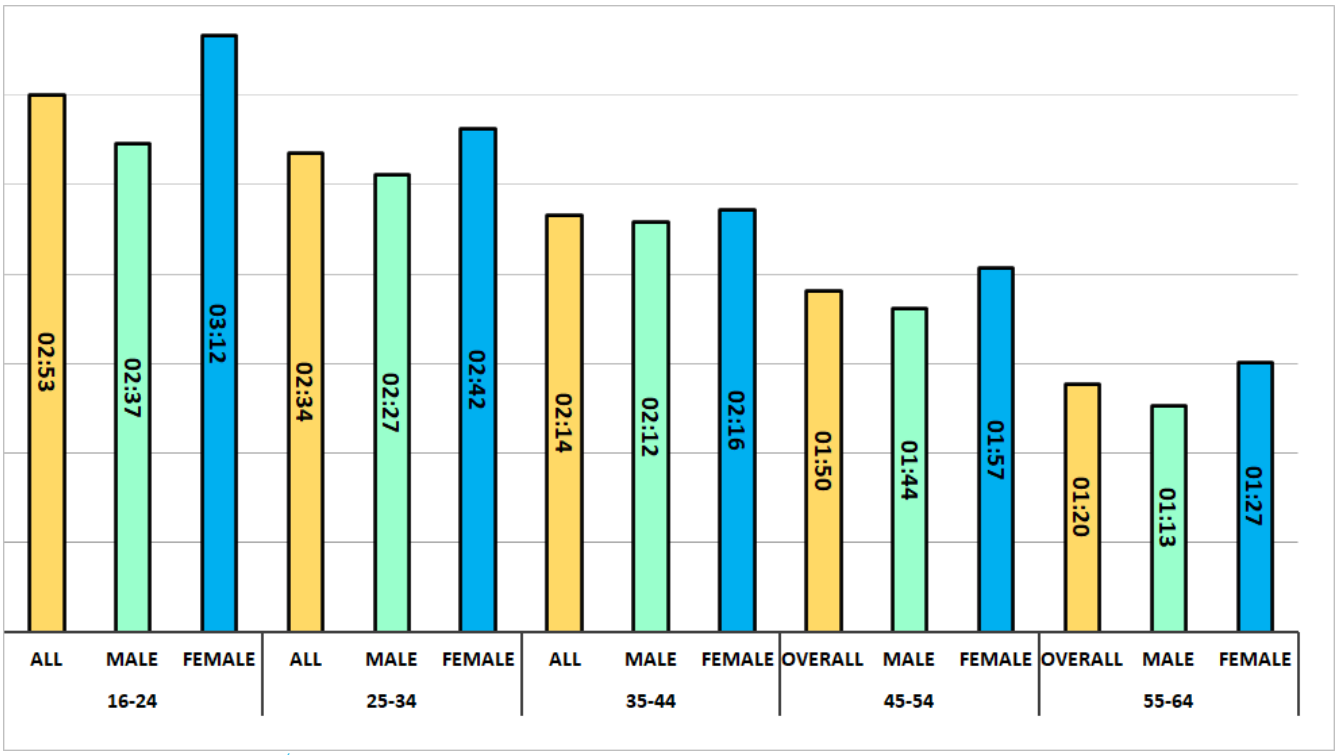
The difference between genders is by far the most evident among these younger users. It becomes smaller as we go up through the age groups, until we get to 35-44-year-olds at which point it is practically non-existent.

Interestingly, at this point it becomes bigger again, with female users among the two older age brackets apparently far keener social media users than their male peers. Indeed, by the time we get to the oldest 55-64-year-old bracket, the difference between the two is equivalent to 16%, which is not too far off the 22% difference we see among the Gen Z users.

The ubiquity of social media is evident in these stats. Despite the fact that usage trails off with age, we have users in their 40s logging usage figures of over two hours. Indeed, even the oldest group included here log 80 minutes a day on average.

That's the length of a trim feature film or a full game of rugby (discounting stoppages, of course).

Social media usage by age and gender



Data source: Hootsuite/We Are Social

There are significant variations across the world in the amount of time spent using social apps, and we see also see some divergent trends within regions in the years leading up to 2020.

In Europe, average daily social usage in 2020 ranges from 76-80 minutes per day in the DACH region and the Netherlands, to a little over 90 minutes in northern Europe (including the UK and France), rising slightly in southern Europe, with Portugal's 149 minutes by far the biggest figure. There's no clear narrative of increase and decrease, with some markets increasing usage (France, Spain), others seeing declines (the UK, Sweden), and others staying pretty much level (Switzerland, Austria)

Across the emerging world, we see much higher daily average figures. In Latin America, average daily figures are around the 3:30 hours mark. Similar figures are logged in the Sub-Saharan African and Middle Eastern markets included in this analysis. We see a bit more variation in southeast Asia, ranging from 2:49 hours in Thailand all the way up to 3:50 hours in the Philippines. Again, it's hard to map any clear trends in this regard.

In the US, usage is a little north of 2 hours, while Canada, Australia, and New Zealand log around 1:45 hours.

Finally, in northeast Asia we see the lower levels of usage; a mere 46 minutes daily in Japan, and 1:12 hours in South Korea. In both instances, the figure has risen slightly. China logs closer to 120 minutes.

Social media time spent by country, 2017 – Q1 2020

DAILY TIME SPENT ON SOCIAL MEDIA | Average h:mm spent using social networks on a typical day

	2017	2018	2019	2020
Argentina	3:12	3:17	3:20	3:21
Australia	1:39	1:34	1:46	1:47
Austria	1:16	1:15	1:18	1:16
Belgium	1:31	1:31	1:34	1:37
Brazil	3:40	3:39	3:40	3:38
Canada	1:48	1:47	1:50	1:45
China	1:58	2:00	2:13	1:57
Colombia	-	3:34	3:46	3:30
Denmark	-	1:35	1:35	1:34
Egypt	3:06	3:05	3:02	2:38
France	1:24	1:22	1:36	1:36
Germany	1:13	1:08	1:19	1:20
Ghana	2:59	3:09	3:07	3:13
Hong Kong	2:00	1:53	1:55	1:54
India	2:25	2:28	2:28	2:36
Indonesia	3:26	3:23	3:18	3:18
Ireland	1:45	1:55	1:53	1:42
Israel	-	-	1:59	2:10
Italy	1:53	1:48	1:51	1:48
Japan	0:46	0:40	0:44	0:46
Kenya	2:50	2:59	3:16	3:34
Malaysia	3:06	3:03	2:56	2:55
Mexico	3:11	3:14	3:21	3:23
Morocco	2:22	2:34	2:30	2:19
Netherlands	1:24	1:17	1:19	1:17
New Zealand	1:49	1:42	1:46	1:41
Nigeria	3:03	3:26	3:30	3:42
Philippines	4:00	4:08	4:00	3:50
Poland	1:42	1:45	1:54	1:51
Portugal	2:13	2:12	2:10	2:19
Romania	-	2:34	2:20	2:15
Russia	2:20	2:21	2:28	2:16
Saudi Arabia	2:38	2:52	3:08	3:11
Singapore	2:07	2:11	2:12	2:17
South Africa	2:47	2:58	3:15	3:32
South Korea	1:11	1:11	1:13	1:12
Spain	1:38	1:41	1:49	1:47
Sweden	1:54	1:49	1:49	1:41
Switzerland	1:18	1:19	1:18	1:18
Taiwan	2:06	1:52	1:53	1:42
Thailand	3:06	3:14	2:57	2:49
Turkey	2:49	2:52	2:56	3:05
UAE	2:56	3:00	3:03	3:17
UK	1:54	1:51	1:47	1:41
U.S.A.	2:02	2:05	2:01	2:08
Vietnam	2:36	2:33	2:23	2:22

Data source: GlobalWebIndex

This data pertains to Q1 2020, so does not let us see how coronavirus affected social media usage. As we saw above, significant proportions of users have reported increases in their usage of various types of app, including social media. We can see below how many users in each region reported increased social media usage during the lockdown. Interestingly, the figure seems broadly to correspond with usage time, with regions reporting higher average daily use time (Latin America, Middle East and Africa) seeing more users spending longer with social (56% and 57% respectively).

The US & Canada region is the exception to this, with only 32% of users spending more time with these apps during lockdown, despite a mid-range average daily usage figure. We might note an 'average' figure for Asia in this respect is not necessarily the most edifying, giving the considerable diversity of that region.

How many users in each region have increased social media usage during lockdown

Data source: GlobalWebIndex

Most-used social/messenger platforms

In terms of the most-used social/messenger platforms, there are few surprises at the very top. Facebook, with 2.6 billion users, as of July 2020, is untouchable at the top.

Hootsuite/We Are Social count YouTube as a social site. Whether or not you agree with that categorisation (it is a platform that facilitates user-made content and interaction, and very much has its own ecosystem, so it could certainly be argued on those grounds), Google's mega app counts 2 billion users.

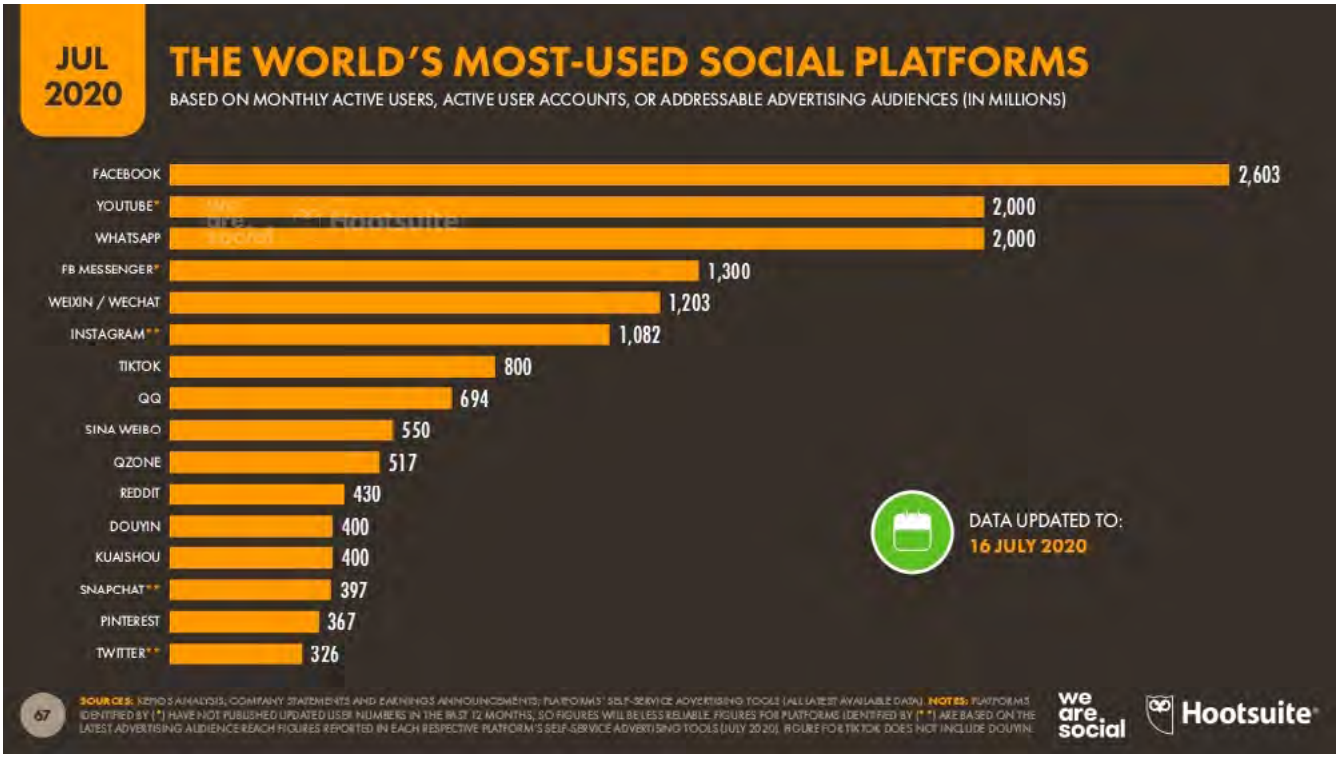
This figure is equalled by WhatsApp, Facebook's ubiquitous messenger (or at least outside of the US), which also logs 2 billion users.

No other app is on the same scale, with Facebook Messenger next, with 1.3 billion users. Not too far behind is the Chinese super app, WeChat, which counts 1.2 billion users, despite being exclusively targeted at the Chinese market (complemented by the diaspora, of course).

This is something of a theme. In among the US names we see a smattering of Chinese-specific names: QQ (0.7 billion), Sino Weino (0.6 billion), and Douyin (0.4 billion).

We might note that this ranking counts Douyin and TikTok (0.8 billion) as separate entities. As it stands, the latter classes as the seventh most-used social app in the world, and the former 12th. Counted together, TikTok would rank ahead of Instagram in sixth.

Most-used social platforms



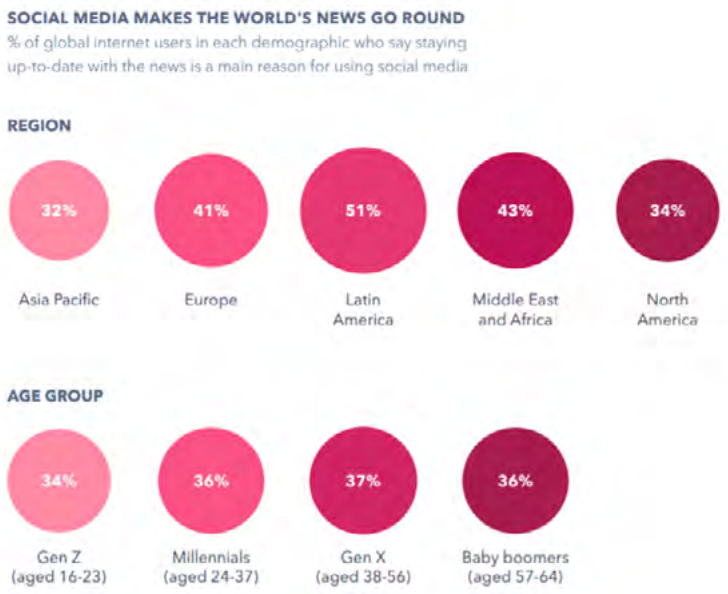
Data source: Hootsuite/We Are Social

Reasons for using social media

Why do we use social media? Clearly these apps quickly evolved beyond staying in touch, and have come to play a far more complex role in our lives. As GlobalWebIndex stats show (these go back to Q1 2020), for many users, social media sites are used to keep up-to-date with what's going on in the world.

High proportions of users in each region say that getting the news is one of their main reasons for using social media. This trend is most evident in Latin America, in which 51% of users report that this is the case. The percentage is never lower than 32% (Asia Pacific). Neither does this trend seem to be weighted towards emerging markets, with 41% of European users coming on social media to read the news.

Social media news usage by region and age



Data source: GlobalWebIndex

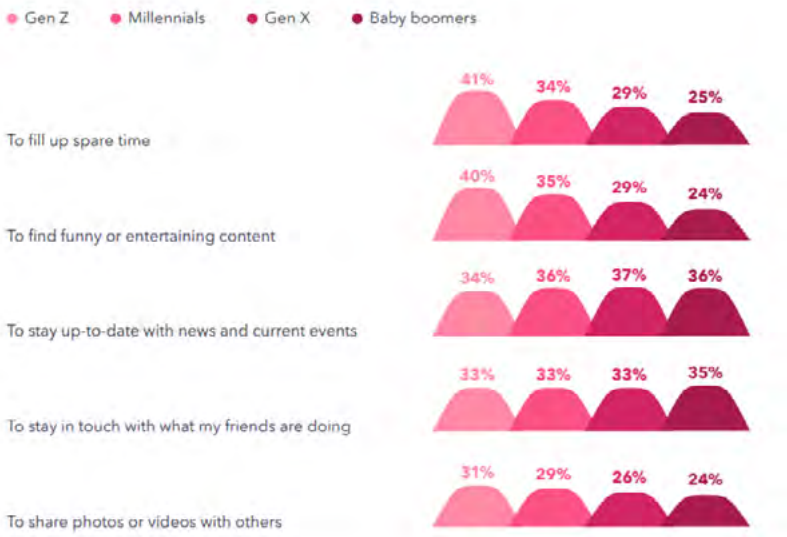
In terms of age, the proportions are relatively consistent, ranging from 34% of Gen Z to 37% of Gen X.

Certainly, these stats have certain implications, particularly where social media companies have been found wanting in certain checks and balances. In a year when we've been more than usually glued to the news, how it is mediated through social media is certainly a matter of no small importance. That so many of us use social media for this purpose is an indication of the fantastic scale of the challenges we face.

Among every age group apart from Gen Z, getting the news is the most frequently cited reason for using social media. Gen Z, on the other hand, are keener on passing the time (41%) or finding entertaining content (40%). We see interest in these categories decline sharply with age, as well as sharing photos (albeit with a less sharp decline)

On the other hand, staying in touch with friends is more consistent across age groups, though we do see slightly higher proportion of the oldest Baby Boomer demographic using social media for this purpose. Indeed, aside from following the news, this is the reason for which the greatest proportion of Baby Boomers turn to social media. The same applies for Gen X users.

Social media reasons for usage by age



Data source: GlobalWebIndex

3.9 OTHER APP CATEGORY USAGE STATISTICS

Shopping app usage stats

In the first quarter of 2020, Global Web Index stats show that 67% of users in select markets had used a shopping app on a mobile device in the last month, with 52% purchasing a product online on a mobile phone.

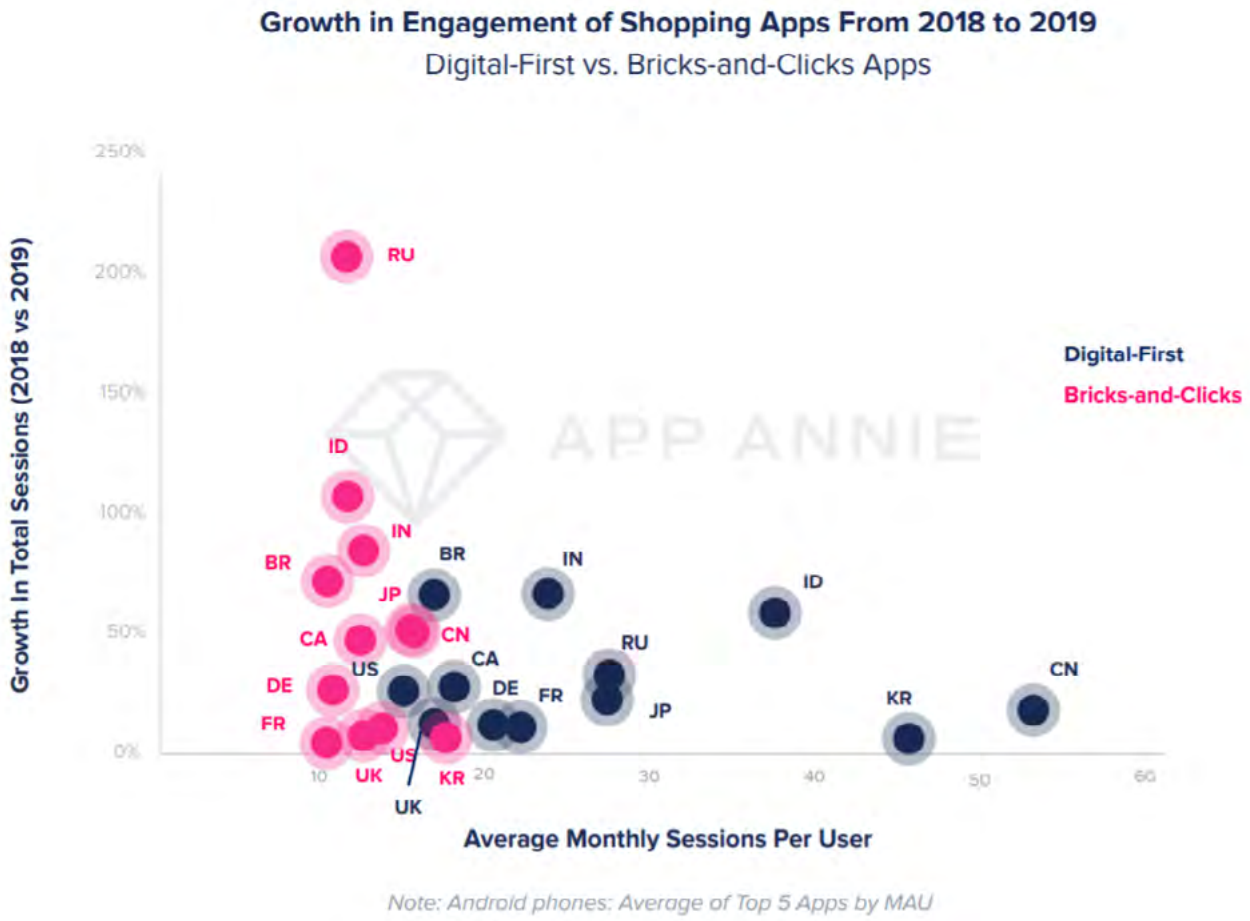
Across the world, we saw increases in the amount of time spent using shopping apps in 2019. This was greatest in emerging markets, such as Indonesia (70%), India (50%), and Brazil (35%). In some highly advanced markets we saw significant levels of growth too: 30% in France, 25% in the US, and 20% in Japan, for example.

App Annie stats also compare digital-first shopping apps with the bricks-and-clicks apps of established high-street shops on a country-by-country basis, looking at average sessions and session growth in 2019.

There is a clear trend towards the bricks-and-clicks category over digital-first apps across markets. China and South Korea lead the way in both app categories. Chinese users use digital first apps over 15 times per month on average and bricks-and-clicks apps over 50. In Korea, we see users logging nearly 20 sessions per month in digital-first apps, and over 45 in bricks-and clicks.

The greatest levels of growth in sessions are seen in digital first apps in Russia, Indonesia, and India. We might note that in India, as in Brazil, we see nearly as much growth in bricks-and-clicks apps, which also log significantly more sessions on average.

Shopping app average sessions and session growth by country and app type, 2019



Data source: App Annie

The two-week period following Black Friday and Cyber Monday in 2019 saw Android users around the world spend 2.5 billion hours collectively using mobile shopping apps, according to App Annie. AppsFlyer stats show that this drove a 18% increase in the share of paying users.

Going back to the comparison between online vs bricks-and-clicks apps, AppsFlyer notes that in the US, retail brands saw a 55% higher share of buying users compared to online only businesses (June 2019 to June 2020). In Europe the figure is 35%.

Other AppsFlyer stats show that in the US, we saw a 36% increase in sessions in general retail apps between January and May 2020, and 40% increase in paying users. The proportion of in-app purchases rose by 65% between July 2019 and March 2020, though remained fairly stable after this point (increased leisure time to use apps offset by the financial insecurities of the lockdown perhaps).

In the APAC region, a 42% increase in shopping app sessions between February and June 2020 came on the back of 28% growth seen between July and December 2019. In the two biggest Latin American markets of Brazil and Mexico, we saw 50% and 90% growth of in-app sessions respectively between April and June 2020.

Education app usage

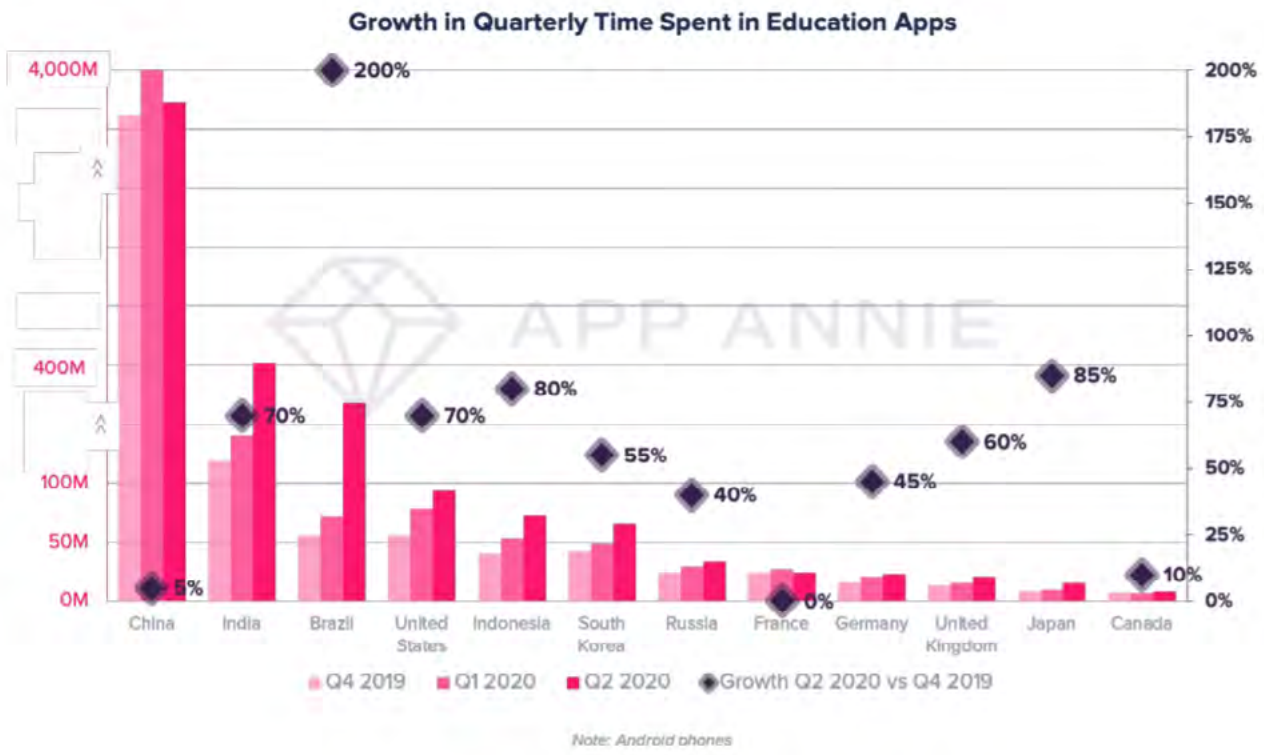
The considerable upswing in education app downloads in Q2 2020 we saw above has been matched by an even greater upswing in usage.

Brazil has seen the greatest increase, at 200% between Q4 2019 and Q2 2020, with Indonesia logging 80% and India 70%. This phenomenon is not limited to emerging economies, however. We might note an 85% upswing in Japan or 60% in the UK; two markets which tend to log lower growth figures.

In absolute terms, it is once again a question of population, with highly populous nations like India, Brazil, and the US logging the highest figures. Second-place India's 400 million hours in education apps in Q2 2020 is totally dwarfed by China's figure of 4 billion hours, however.

We might note the low growth figure of 5% here, suggesting education apps already enjoyed deep penetration in the world's biggest app market. These are Android stats only, so certain markets (the US and Japan, but also the UK and France) will not be proportionately represented here.

Education app usage, Q4 2019 – Q2 2020, millions of hours



Data source: App Annie

Finance app usage

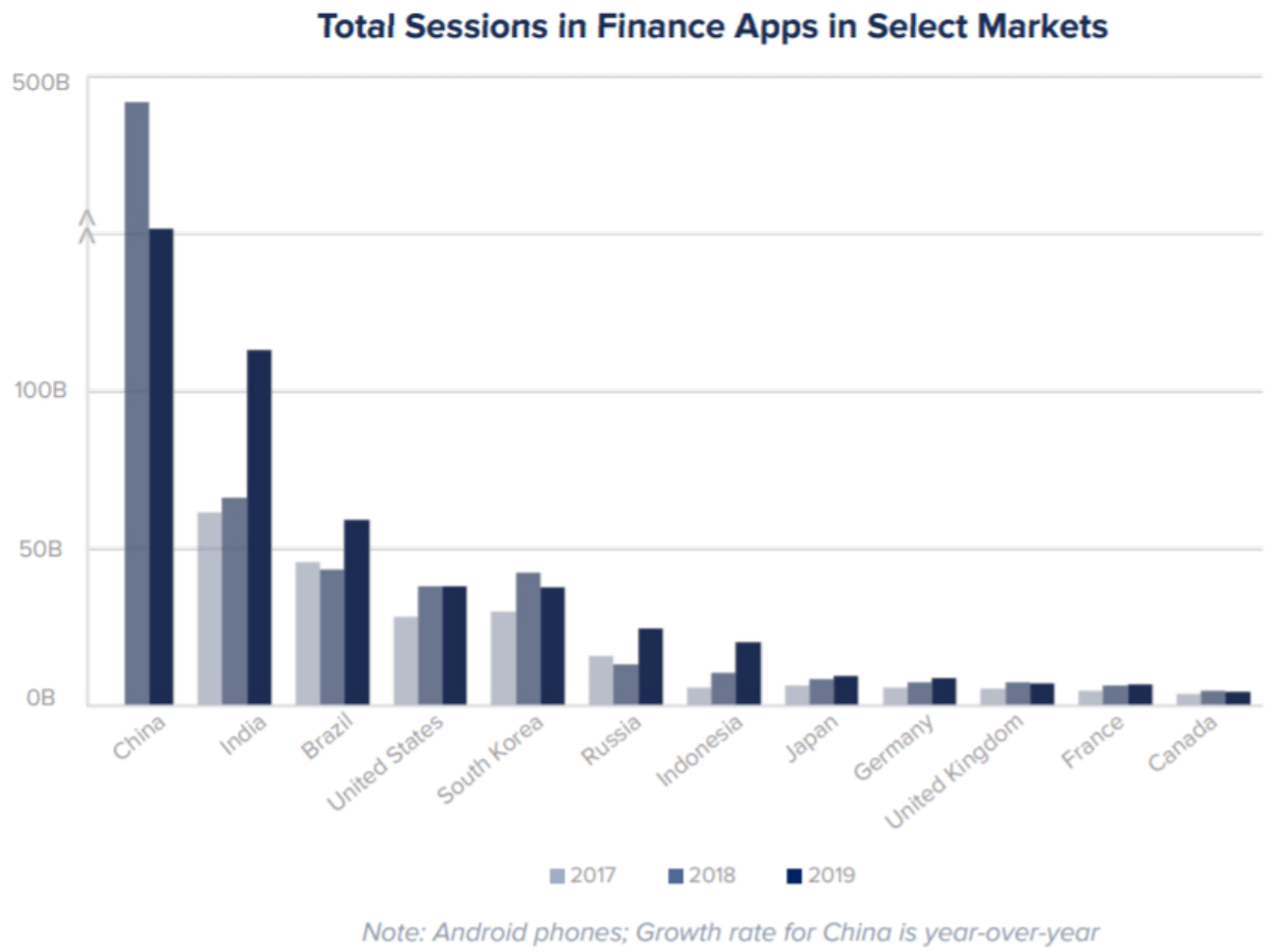
App Annie stats show the finance apps were used 1 trillion times over 2019 (these stats pertain to Android devices only). This represents a 100% increase over 2017. Such apps have clearly come to play an increasingly central role in how we manage our money.

China leads the way for sessions by some distance, registering 450 billion sessions in finance apps (nearly half the global total). Interestingly, this is down on 2018, for reasons that are unclear. Nonetheless, with Alibaba, Tencent, and WeChat all offering payment solutions, finance apps are firmly established in this market.

India comes in second with over 100 billion sessions. We may see this increase sharply in the not-too-distant future, if WhatsApp Pay, with a built-in userbase of 400 million users, gains the approval of the RBI. This is interesting, as we may also see millions of users in this market transition from informal to formal banking through finance apps. Elsewhere we see that Tez, Google Pay branded for the Indian market, enjoyed 50% user growth in 2019.

Other markets in which we see prominent use of finance apps are Brazil, the US, and South Korea. In each of these markets, we saw increases in usage between 2018 and 2019. The exceptions to this are the UK and Canada, where we saw small declines in usage in 2019. This is counter to the overwhelming global trend, however.

Finance app sessions by country, 2017 – 2019



Data source: App Annie

App Annie stats also show that much of the growth in finance app users has been generated from fintech apps. These have grown at a significantly faster rates than traditional banking apps. Apps like Starling Bank, Revolut, and Monzo have clearly tapped into a market ready for new ways of banking.

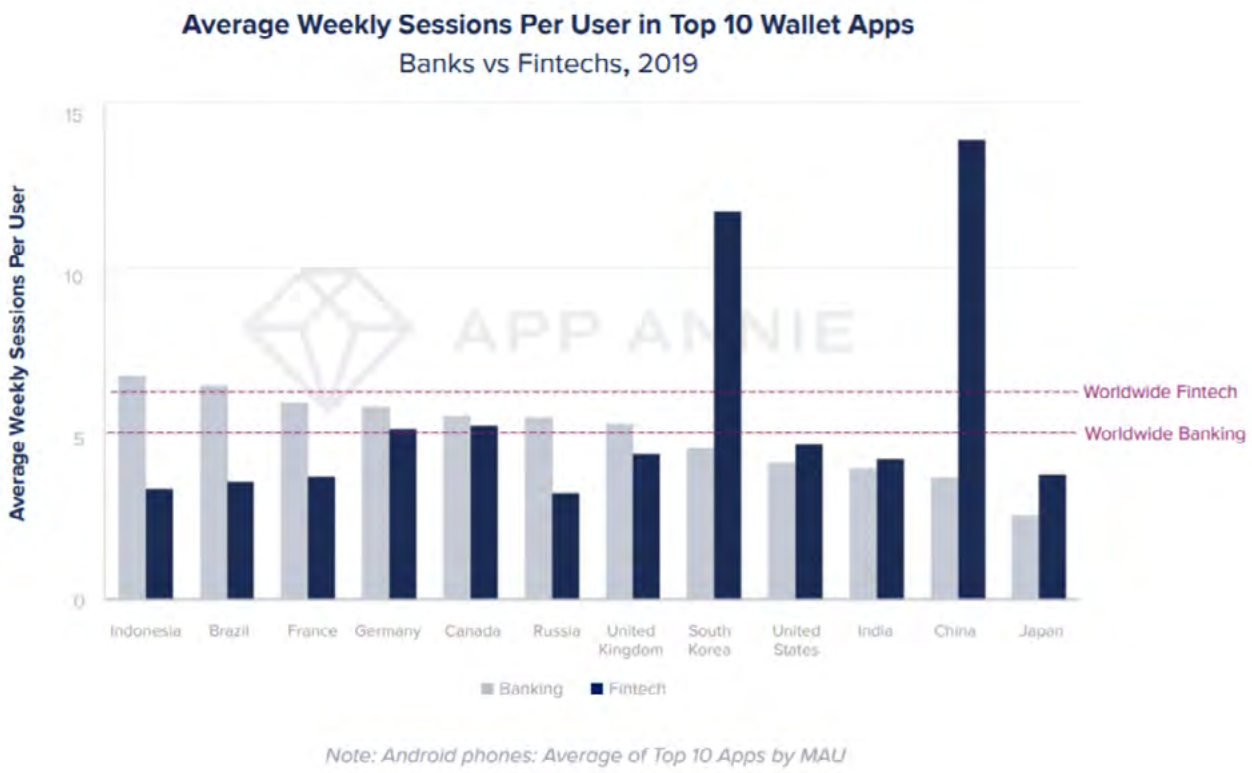
Focusing on digital wallets, fintech companies registered six average weekly sessions in 2019, compared to five in wallet apps from traditional banks, worldwide. This does not tell the full story, however.

In a little over half of markets here, users favour apps from traditional banking institutions. This is most prominently the case in Indonesia and Brazil, and is universally the case across the Western European markets included in this analysis.

On the other hand, in highly-digital Asian markets such as South Korea and China (and to a lesser extent Japan), we see considerably more sessions in fintech apps, as well as more sessions overall. These two facts in combination mean that the global average is therefore skewed in favour of fintech apps. Fintech apps also account for the greater share of sessions in the US and India.

These stats look at average sessions on Android phones for the top-10 apps by MAU.

Average weekly sessions in digital wallets, 2017 – 2019



Data source: App Annie

Other stats published on Statista indicate that countries hit early by coronavirus saw a considerable upswing in average finance app usage in Q1 2020. Japan leads the way here, with 55% growth in sessions, followed by South Korea with 35%, and China on 20%. Interestingly, we also saw 20% growth in the US, even though it was hit later on.

In Europe, Italy and Germany led growth at 15% apiece, while usage remained stable in France and Spain – perhaps more conservative in their adoption.